

2012

Sustainability Report

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ENERGIZE · HARMONIZE · REALIZE
PetroChina Company Limited

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>100%

The Company maintained its oil and gas equivalent reserve replacement ratio at over 100% for the 13th consecutive year, reinforcing the stability of its reserve base.

916.5 million barrels

Crude oil production increased 3.4% year on year to 916.5 million barrels, marking the highest rate of increase.

42 million tons

Daqing Oilfield maintained an annual crude output of over 40 million tons for 10 consecutive years. Changqing Oilfield's oil and gas production exceeded 42 million tons of oil and gas equivalent, ranking first in China.

40%

The Company accounts for over 40% of oil products supply in China.

Ø

Operational safety has been ensured with no major accidents reported.

19.26 million cubic meters

The Company saved 1.21 million tons of standard coal and 19.26 million cubic meters of water, with SO₂ emission 0.3% lower than the previous year's level.

Completed

Construction of the pipelines branching off the Second West-East Gas Pipeline has been completed, which is ready to deliver gas to the HKSAR.

362 billion RMB

The Company reported a tax payment of RMB 362 billion under IFRS.

About PetroChina

PetroChina Company Limited (PetroChina, hereinafter 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. By 31 December 2012, CNPC held over 86% of PetroChina’s shares.

We provide sustainable energy for economic and social development through honest, stable and responsible modes of operation. We pursue harmonious relationships between energy and the environment, production and safety, corporate and community, employers and employees.

Our Mission	Energize · Harmonize · Realize
Our Values	Honesty, Innovation, Safety and Distinction
Our Vision	Being an internationally competitive energy company by 2020
Business Strategy	Resource, Market, Internationalization
QHSE Concept	Emphasis on the environment and safety, high quality and people-oriented
QHSE Objectives	Zero Defect, Zero Injury and Zero Pollution
International Cooperation Concept	Cooperation for mutual benefit and joint development

Appraisals and Awards in 2012

Agency	Appraisals and Awards
Forbes	7 th in Forbes Global 2000
Platts	9 th in Platts Top 250 Global Energy Company Rankings
Institutional Investor	Most Admired Company (Asia) Best Company (China)
Energy Intelligence	5 th in Energy Intelligence Top 100
Financial Times	3 rd in FT Global 500
FinanceAsia	3 rd on FinanceAsia’s list of credit rankings

Core Business

As a leading oil and gas producer and distributor in China, PetroChina is engaged extensively in the oil and gas businesses, including:



Oil and gas exploration and production

We are a leading oil and gas producer in China, operating in a number of major oil and gas producing regions such as Daqing, Changqing, Xinjiang, Liaohe, Tarim and Sichuan. By the end of 2012, our oil and gas production accounted for more than 60% of domestic total oil and gas production, providing energy to fuel the economy’s growth.



Production, transportation and storage of crude oil and petrochemical products

We are one of China’s major producers of petroleum products. In 2012, we processed 1,012.5 million barrels of crude oil and produced over 91 million tons of refined oil products, 98.4% of which was high-grade gasoline. Our ethylene production reached 3.69 million tons. We have built seven 10Mt/a refining bases and five large-scale ethylene bases.



Production and marketing of petrochemical products

We are one of the major distributors of oil products in China, with a market share of over 40%. In 2012, we owned 19,840 service stations and more than 13,100 convenience stores, covering 32 provinces (municipalities and autonomous regions) across the country, supplied over 24 million tons of petrochemicals.



Natural gas transportation and distribution

We are China’s leading producer and distributor of natural gas. Our supply meets 70% of the country’s total demand through nationwide gas pipeline networks, which serve 500 million people in 28 provinces (municipalities and autonomous regions) and the HKSAR at the end of 2012.



International business

In line with our goal to become an internationally competitive energy company, we maintain an international approach in our strategy and have made great strides in growing our international operations. Currently, we have established five international oil and gas cooperation zones in the Middle East, Central Asia, Asia-Pacific, Americas and Africa, and three oil and gas operation centers in Asia, Europe and the Americas. We saw coordinated growth in our overseas E&P, refining, and international sales and trade businesses. The expansion of our international oil and gas cooperation has been substantial in terms of size and scope, and the volume and value of international trade are also growing rapidly. The Company’s oil and gas production and turnover accruing from its international business have increased substantially. PetroChina has determined the form of the international energy company it wants to take, marking its shift from a national oil company to an international energy player.

Chairman’s Statement

Faced with the slow global economic recovery and sluggish growth in energy demand growth in 2012, we exemplified our corporate mission of “Energize, Harmonize and Realize” and worked towards becoming a “Green, International and Sustainable PetroChina”, accelerated the implementation of strategies of “Resources, Market and Internationalization”, by picking up pace in our structural reforms and changing our growth model. This resulted in rapid growth that could be effectively sustained.

Structural adjustment: Optimized business portfolio and value chain

Resources are fundamental to our business sustainability. We understand that fossil energy is non-renewable and therefore define sustainability as maintaining society well-being with finite resources, through optimized allocation and utilization of energy resources. To this end, we focus on oil and gas exploration activities to optimize the reserve-production structure. In 2012, the reserve replacement ratio of the Company stood above 100%, ensuring a strong reserve base for growth in China. Our gas production increased rapidly, accounting for more than a third of the Company’s total output. The Company promoted large-scale intensive refining and petrochemical operations with seven 10Mt/a refining bases and five ethylene production bases taking shape in the year. We developed high-end and clean products to upgrade our product line, improved our marketing network and oil products sales structure, upgraded our domestic pipeline networks and imported a large amount of natural gas. We also further developed our town gas, CNG (Compressed Natural Gas) and LNG (Liquefied Natural Gas) businesses, which resulted in a new gas marketing structure with a higher market share. The Company took a big leap forward in our international operations by stepping up efforts abroad, with major overseas cooperation zones and operation centers taking shape. In sum, 2012 was a year that saw steady increases in oil and gas production output, crude processing volumes, and sales of oil products and natural gas. Our business portfolio and value chain have been further streamlined to facilitate coordinated growth and enhanced supply security.

Shifting development pattern: Strengthening technological and managerial innovation

As innovation is one of our strategic approaches in driving our sustainable development, we will vigorously strengthen

innovation and accelerate the transformation of the Company’s development pattern. We believe that only innovation can sustain the scale, growth rate and efficiency of our business success. In 2012, we continued to invest in R&D, enhance innovation, and focus on major scientific and special technological research projects and major field test projects so as to enhance our independent innovation capabilities. We then apply the findings of our research and the fruits of our R&D work into our production and operations activities. For example, multi-stage fracturing for horizontal well is now widely used in our development activities, and we have achieved continuous improvements in exploration and development technology for low pressure and low permeability oil and gas reservoirs. Our proprietary 600Kt/a ethylene package solution has been successfully applied to expand and upgrade existing units. We also achieved major progress in fundamental research projects such as the use of nano agents for oil displacement. As part of the Digital PetroChina initiative, we launched three IT projects: an ERP-based Information System, the Internet of Things, and a Cloud-based Data Center. Meanwhile, corporate governance was stepped up through overall budget management, benchmarking, meticulous management as well as risk control in key areas, key aspects and key processes. Joint ventures and cooperation with social capital, financial capital and international capital were encouraged to play an active role in our operation. The innovations we have achieved in technology and management have contributed to the steady improvement in the quality and business growth.

Sustainability: Green and low-carbon development

Safety, conservation of resources and environmentally friendly practices are three important aspects of sustainability. It is our unwavering goal to strike a balance between the Company’s development and resources, the environment, society and people. In 2012, we continued to implement and improve our HSE system, focusing on raising awareness on safety and environmental protection, managing hidden hazards and sharing experiences. Energy conservation demonstration projects and emissions reduction projects were carried out to further improve our HSE performance. We implemented a series of medical examination programs and occupational disease countermeasures for the sake of our employees’ physical and mental health, and a multi-tier medical insurance scheme was established for better health

management. Meanwhile, we accelerated the exploration and development of unconventional resources such as CBM and shale gas, pushed ahead in the production of fuel ethanol, biodiesel and aviation bio-kerosene in an orderly manner, and strove to increase the supply of natural gas, high grade gasoline and jet fuels, in order to do our part in creating a cleaner environment. We actively worked for the public good in the countries and regions in which we operate, supported socio-economic development in the local communities, and shared our achievements with our partners. Our CSR activities are widely recognized by local governments, our business partners, the media and local residents.

With multi-polarity and economic globalization prevailing in today’s world, we have continued to enhance cultural diversity and social informatization, we have made new breakthroughs in scientific and technological developments, and we have been engaging in global co-operation at all levels and in all dimensions. The global economy is undergoing a transition and is growing at a slower pace. New trends and transformations are emerging in the global energy landscape, particularly with the balance in global oil supply-demand, which will see little change, while natural gas will experience major growth at the same time. In China, we will see a robust increase in energy demand in light of China’s boundless development potential, especially with the goal set during the 18th CPC National Congress of transforming China into a moderately prosperous society through rapid industrialization, IT revolution, urbanization and modernization of agricultural production, which all present tremendous opportunities for the oil and gas industry.

We will adhere to our business strategy “Resources, Market and Internationalization”, enhance quality and efficiency, and focus on oil and gas operations and sustainable growth. We will accelerate the transformation of our development pattern, strengthen scientific management and enhance safety and environmental protection. Human resources have always been our top priority as we continue to protect and improve people’s livelihoods. PetroChina will strive to create a green, international and sustainable corporation, one that is loyal, responsible and respectable, to achieve better returns for our shareholders, employees and society.



江济民

Jiang Jiemin, Chairman of the Board

Insights from the President

What is your take on the role that strategic management can play in a company's sustainability?

Strategic management tops the corporate operations management as it determines a company's direction and future development. A unique managerial advantage is essential to a company's core competitiveness and its sustainability. At PetroChina, we strengthen our management in order to enhance our competitive advantages and our ability to manage risks. In recent years, we have accelerated the implementation of strategy of "Resources, Market and Internationalization", made the goal to become an internationally competitive energy company, developed a comprehensive strategic management system with well-defined strategic proposition, development direction, key initiatives and supporting measures, and have made remarkable strides in boosting our resource base.

In the near future, we will continue to focus our strategic initiatives on innovation, cooperation, strengthening human capital and enhancing management while maintaining consistency and continuity in our strategic performance. Firstly, we will adhere to a "business unit-led, operation-oriented and project-driven" management model to facilitate the implementation of top-level schemes and to consolidate the fundamental system. By doing so, we will lay a solid foundation on which our management will accomplish our strategic goals. Secondly, we will adhere to the principle of intensive, professional and integrated operations in building internal control mechanisms that are accountability-based, rational, streamlined and dynamic so as to ensure the effectiveness of an organizational structure, business processes and management methods and to keep our employees motivated. Thirdly, we will integrate risk control into our daily management by introducing prediction, early warning and risk control monitoring mechanisms to ensure an effective scientific approach.

How does PetroChina perceive proprietary innovation as a driving force for sustainable development?

As a core element of global competitiveness, proprietary innovation provides strategic support to sustainable development. PetroChina is committed to innovation and development, i.e. bolstering business growth by investing in R&D and improving

the quality, efficiency and the innovation structure. We have strengthened our R&D capabilities and developed a series of key technological solutions that will support the rapid growth of our core business.

We will continue to put technological innovation at the core of our strategic development and will further improve the reform of our science and technology management. Meanwhile, top-level design will be reinforced with focus on three major technological innovation initiatives, to tackle technological bottlenecks and to sharpen our unique and superior technologies through intensive R&D efforts and field tests, so as to turn our company into a top internationally recognized innovative oil enterprise in terms of technological capabilities.

How do you view the role of talent in business growth?

Our talent is our most valuable asset, and is essential for us to strengthen our innovative capabilities. We place great importance on cultivating talent. In 2012, we continued to launch education and training programs for all employees, to optimize the talent pool of managers, technical experts and skilled workers and recruited high-level talent from abroad. The mechanism for evaluating, recruiting, training and motivating talent has been in place. With a series of key projects, programs and R&D projects in progress, our people enjoy plenty of opportunities for career development.

The Company will remain committed to "bolstering business success with talent". Managers, technical experts and skilled workers will be given training, hands-on experience and job rotations. A parallel managerial-technical system will be developed to facilitate talent management and motivation. Training programs that highlight and advocate dedication and professionalism will target staff in key positions and front-line staff. We will further lift educational background-related restrictions and identity issues in employee development to provide employees a smooth growing channel. Meanwhile, we will bring in international talent, foster foreign executives and promote local employment in our overseas operations. PetroChina commits considerable effort to cultivating a high-quality talent team with leadership skills and international perspectives to transform the Company's human capital into a competitive advantage.

IT is increasingly important in the development of enterprises. What are the Company's IT initiatives?

Information technology is an important mean to improve strategic management and to enhance efficiency and transparency in decision-making. The combination of IT and industrial technology will help streamline the production process, strengthen process control and boost productivity, hence facilitating the shift in growth model and bringing about sustainability. In 2012, we launched three IT projects, i.e. an ERP-based Information System, the Internet of Things, and a Cloud-based Virtual Data Center. Meanwhile, the information security system has been taking shape as IT applications play an increasingly significant role in the enhancement of management and improvements in productivity.

In future, we will continue to implement these three IT projects on the basis of "operation-oriented, overall coverage and in-depth integration" guidelines to boost interoperability, adoption and sharing. We will implement comprehensive IT system planning and introduce the technology into our production and management activities while facilitating the integration of the system and coordination of the business to enable full integration. We believe these initiatives will help PetroChina become a digital and intelligent business enterprise and will bring the efficiency of the Company's production and management to higher levels.



周吉平

Zhou Jiping, Vice Chairman of the Board
and President



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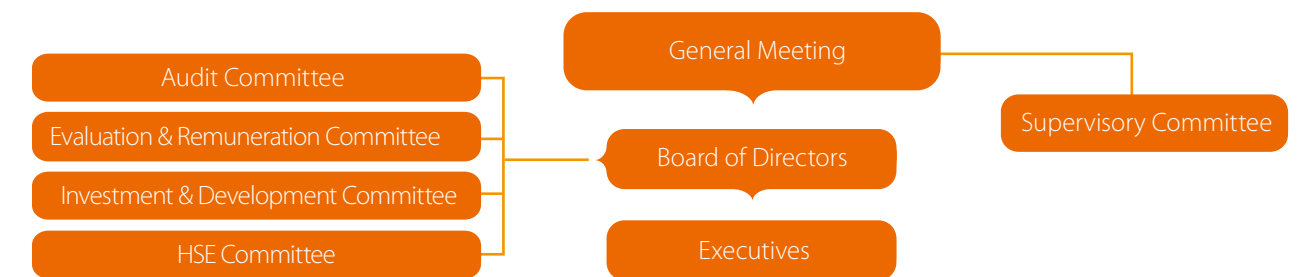
CORPORATE GOVERNANCE

Good corporate governance safeguards PetroChina's sustainable development. We are committed to regulatory compliance, integrity and upholding our corporate constitution. We continue to improve our corporate governance structure and accountability systems in line with relevant regulatory rules and also continue to enhance our systems for effective measurement and control. Additionally, we protect the rights and interests of our shareholders under the principle of being fair and credible while endeavoring to enhance our intrinsic qualities and values through ethical behavior and sound governance.

1. Corporate Governance Mechanisms

As one of the first Chinese companies to be listed in the stock markets of both Hong Kong and New York, PetroChina has set itself the target of being a market-oriented enterprise with the international best practices. Since its debut, PetroChina has established its corporate governance structure in compliance with international rules and regulations and this includes the comprising of Annual General Meetings, establishing a Board of Directors, a Supervisory Committee and the executive management team led by the President. These mechanisms work effectively to ensure coordination, balance of power and regulatory compliance. Listed in Hong Kong, New York and Shanghai, the Company has taken the initiative to improve its mechanisms and controls for corporate governance in response to changes in market environment and regulatory requirements.

Corporate Governance Framework



Shareholder and Annual General Meeting (AGM)

The general meeting of shareholders is the highest authority in the management of the Company. PetroChina's general shareholders meetings are held annually and all shareholders are treated equally in exercising their rights effectively. When a connected transaction is presented to the general meeting for consideration, CNPC as the controlling shareholder of PetroChina will abstain from voting, to ensure fairness.

directors have attended board meetings and performed their duties earnestly and diligently in making decisions on major issues, appointing and reviewing the performance of executive board members, and engaging with shareholders. Independent directors are encouraged to express their views on the Company's major decisions from a comprehensive and objective perspective, playing a constructive role in maintaining sound operations and protecting the interests of minority shareholders.

Board of Directors and Board Committees

Accountable to the shareholders, the directors and the committee board plays a key role in the Company's corporate governance. The board has several committees, i.e. Audit Committee, Evaluation & Remuneration Committee, Investment & Development Committee and HSE Committee, and each give consultation in the board's decision-making process.

As of the end of 2012, the Company has 13 directors, including 5 independent non-executive directors who are a chairman and/or member of the above-mentioned committees. The board is composed of legal, financial and industrial experts. All

A corporate secretariat, established when the Company went public and administered by the board of directors' secretary, is responsible for coordinating the board's activities, information disclosure, investor relations, public relations and communication with external stakeholders such as securities regulators.

Supervisory Committee

As specified in laws and administrative regulations, the Supervisory Committee is responsible for carrying out the duties of the AGM such as performing duties, attending supervisory committee meetings, participating in all board meetings, reporting to the AGM, and preparing proposals and reports for the Supervisory Committee. In order to be responsible for all shareholders, the Supervisory Committee supervises and monitors the compliance

of finance officials, directors and other senior management of the Company, and also proposes recommendations for major business operations and investment projects.

As of the end of 2012, the Company's Supervisory Committee has 8 members, 3 being employees and 1 being an independent member. In addition to improving the supervisory system and performing supervisory duties, the Committee continues to introduce new approaches and mechanisms, including supervisory inspections and surveys. The Committee has also developed the procedure of meeting with various regulatory agencies. Meanwhile, the members meet regularly to share information, expand monitoring channels and broaden perspectives.

Independent Non-Executive Directors

The 5 th Board of Directors has 13 members, including 5 independent non-executive directors, accounting for more than one third of the total, reflecting a better democracy. These independent directors come from different countries with a variety of expertise, including petroleum and petrochemical, accounting, finance, international investment and portfolio management. They are encouraged to use their expertise to give consultancy service towards the Company's development.	
Liu Hongru	Chairman of Evaluation & Remuneration Committee. As ex-chairman of the China Securities Regulatory Commission, Liu has a wealth of experience in securities market regulation and M&A, and possesses the accounting or financial management qualifications required under <i>Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited</i> .
Franco Bernabè	Chairman of Audit Committee. Franco Bernabè is an internationally renowned expert in petroleum development and operation with great insights on the international oil market and many years of experience in cross-sector capital management.
Li Yongwu	Chairman of Investment & Development Committee. Li Yongwu has many years of experience in petrochemical operations and sizable petrochemical project management. He is also an expert in petrochemical investments.
Cui Junhui	Member of Audit Committee. Cui Junhui is experienced in tax and financial audits. With a wealth of expertise and experience, Cui plays an important role in the Company's internal controls, accounting, auditing and tax policy.
Chen Zhiwu	Member of Audit Committee and Evaluation & Remuneration Committee. Chen Zhiwu is an internationally renowned economist who is versed in laws and policies of China and the United States, and experienced in M&A as well as capital operations.

Executive Body

The Company's executive management, presided over by the president and including vice presidents and CFO, serves as the executive body. Appointed and reviewed by the Board of Directors, it is responsible for implementing the board's resolutions and carrying out day-to-day business activities under the *Articles of Association* and as authorized by the Board of Directors. The Company has a two-tier management system comprised of headquarters and local offices, and a three-tier business system, i.e. headquarters, subsidiaries and local operations. Our core business has four sectors, i.e. exploration & production, refining & chemicals, marketing, and natural gas & pipeline.

“There is no reason to stop going all out”

— A eulogy for Mr. Sun Bo, a senior manager of PetroChina

On December 8, 2012, Mr. Sun Bo, Vice President of PetroChina, passed away at the age of 52 after a cerebral hemorrhage on November 21, 2012. “For someone like me who has long been a part of PetroChina, there is no reason to stop going all out.” This was what Mr. Sun Bo used to tell to people around him from time to time. Being seen as a model example for PetroChina's senior managers, his death is a huge loss for the Company.

Born in February 1960, Mr. Sun Bo graduated from East China Petroleum Institute with a degree in petroleum production engineering in July 1983, and became a senior engineer later. He had been Vice General Manager of Al-Waha Petroleum Co., Ltd. since June 1996. After that, he became a Vice President of CNPC International (Venezuela) in October 1998, Vice General Manager & Chief Engineer of China National Oil & Gas Exploration & Development Corporation (CNODC), President of CNPC International (Venezuela) in September 1999 and General Manager of China Petroleum Engineering & Construction Corpotation (CPECC) in January 2004. Two years later he was appointed Vice Chairman & General Manager of CNPC Services and Engineering Ltd. and General Manager OF CPECC in June 2006, and General Manager of Trans-Asia Gas Pipeline Company Limited in September 2007. He had been Vice President of PetroChina and General Manager of Trans-Asia Gas Pipeline Company Limited since January 2010.

Mr. Sun Bo spearheaded PetroChina's move into overseas operations and took charge of the construction of the Central Asia Oil & Gas Cooperation Zone. He had over 10 years of experience working in the Middle East, South America and Central Asia, spending a lot of time among many overseas projects. After meticulous research and time-consuming, difficult negotiations, he managed to seal a number of international cooperation deals. Thanks to his unwavering support, a series of new techniques were widely used in oilfield development, many technical issues in overseas operations were successfully addressed

and PetroChina was able to get access to some high-end markets across the world. Many accolades in China's oil industry were attributable to his work and he had been highly praised for his contribution to PetroChina's overseas business growth.

Mr. Sun Bo was enthusiastic about the career he had chosen, with his behavior embodying the Company's core values. As a technical expert, he played a leading role in numerous R&D programs which had led to dozens of technological achievements. As a senior executive officer, he was the person who made excellent business performance possible. At the same time, he was a modest and considerate leader who was respected and admired by his employees and peers. Under his strong leadership, PetroChina completed the Central Asia-China Gas Pipeline Project within 28 months - although a project of such size would had normally required 6 years or longer. A miracle in the history of pipeline construction, the project was praised by the leaders of both countries as “a model of Sino-Kazakhstan economic cooperation”.

Mr. Sun Bo had received many awards, including the state award of the Republic of Kazakhstan, and the 2011-2012 China Great Entrepreneur. As a PetroChina employee, he set an example of dedication, diligence and unselfishness, and as a senior PetroChina executive officer, he was the epitome of competence, integrity, innovation and excellence. He devoted his whole life to his career. On February 8, 2013, he was posthumously awarded by the Ministry of Human Resources and Social Security and the State-owned Assets Supervision and Administration Commission of the State Council the title of “Model Worker of State Enterprises”. On February 20, 2013, he was granted the title of “National Excellent Party Member” and awarded the “May 1st Labor Medal” respectively by the Organization Department of the CPC Central Committee and the All China Federation of Trade Unions.

2. Pursuit of Best Practices

The Company has continued to improve its corporate governance on the principle of being scientific, democratic and responsible, to guarantee sustained growth in its operating results as well as shareholder value. We have tailored our governance practices based on standard approaches.

An Ethical and Efficient Board of Directors

Submitting to the authority of the Supervisory Committee, the Board of Directors reports to the general meeting, implements resolutions passed at the general meeting and makes decisions on major issues such as investment plans. Any major investment decision must be reviewed by the Investment & Development Committee before it is presented to the Board of Directors for consideration.

Board meetings are convened on time in accordance with the *Articles of Association*, the board's rules of procedure and requirements on sending meeting notices and registering proposals. There has been no delay in convening a board meeting and the Supervisory Committee has been invited to every regular meeting. In addition to supplying a copy of the proposal as well as the background information to an independent director, the Company has provided periodic briefings and feedback to facilitate the decision-making process.

Engagement with Independent Directors

Every director has the right to express his/her opinions at board meetings. Independent directors are encouraged to provide views

on the Company's major decisions from a comprehensive and objective perspective, playing an important role in the Company's growth.

The board secretariat provides independent directors with detailed information about the Company's strategic planning, operations and regulatory compliance. In addition to a monthly report covering the Company's operating results and market performance, the Company have provided the independent directors with newsletters and briefings from time to time highlighting the latest major developments and events in relation to the Company's business growth, upstream and downstream operations and management procedures, so that the board of directors can make informed decisions in an efficient way.

We formulated the Guidelines for Site Visit of Independent Directors to help independent directors develop a better understanding of the Company. At the beginning of each year, a site visit schedule is prepared and implemented by the board secretariat, taking into consideration the independent director's own schedule. Site visits can also be arranged upon request. The purpose of the site visit is to allow independent directors to have a close look into the Company's operations while building communication and mutual trust. In 2012, independent directors visited our facilities in Tarim Oilfield, Changqing Oilfield, Guangxi Petrochemical and our marketing arms in Guizhou and Yunan. Meanwhile, independent directors received the information from management about operating results of the year and exchanged ideas with the third-party accounting firm on the financial audit.

Corporate Governance Practices in 2012

Annual General Meeting	<ul style="list-style-type: none">The 2012 annual general meeting was held to approve 7 resolutions, such as <i>2012 Annual Report of the Board of Directors</i>, <i>2012 Annual Report of the Supervisory Board</i> and <i>2012 Annual Financial Statements</i>.
Board of Directors	<ul style="list-style-type: none">Four regular board meetings and 3 temporary meetings were held, 31 resolutions were passed.The <i>Board of Directors' Handbook</i>, <i>Rules of Procedure for Board of Director</i> and <i>Guidelines for Independent Directors</i> were formulated.Rules of Procedure were formulated for each of the four committees, specifying the requirements on giving notice of the general meeting or board meeting, preparing proposals, convening a meeting, voting rules and minutes etc.Board meetings were held and requirements on meeting notices and proposals were observed in accordance with the <i>Articles of Association</i> and <i>Rules and Procedure for Board of Directors</i>.Proposals and background information were supplied to independent directors, together with periodic briefings and feedback to facilitate the decision-making process.
Supervisory Board	<ul style="list-style-type: none">Four meetings were held to hear reports from relevant departments and committees, pass 12 proposals and review the Company's annual report. The general election was completed and the new chairman was chosen. The Supervisory Board also provided assistance in the process of information disclosure as required by the regulatory authorities.The Supervisory Board attended 4 board meetings and submitted 5 memorials.The Supervisory Board attended the general meeting and presented 2 proposals for consideration.The Supervisory Board conducted financial surveys. It also made supervisory inspections and presented reports with suggestions for improvement.



Case Study The important role of independent directors in board decision-making

The sixth meeting of the 4th board of directors reviewed the proposal on acquiring the refining assets of ten refineries including Daqing Petrochemical Plant. We believe that this deal, as a key initiative, reflects the Company's focus on its core business (refining and petrochemical operations). Additionally, it will help achieve the goal of "intensive operation, professional management and coordinated development", while reducing connected transactions with CNPC and avoiding conflict of interest with CNPC.

The Board held a meeting to discuss this proposal in detail, with independent directors showing great concern and voicing different views in areas such as the timing of the acquisition,

assets valuation procedures and future prospects. After thorough discussion and consideration, the Board agreed with independent directors and recommended the management to execute and manage the plan one step at a time, to maximize the potential benefits. The Board also heeded their advice to engage an independent financial advisor to review the proposed deal. After the meeting, the Board Secretariat conveyed these opinions to the relevant departments and appointed an approved third-party financial advisor to conduct an independent review on the deal, which arrived at the same conclusion as the previous review. The transaction was successfully completed.



3. Strengthening Internal Controls

The improvements in internal controls are essential to ensure the effectiveness of organizational structure, business procedures and management practices, while keeping our employees motivated. The Company adopted an approach stressing on intensification, specialization and integration, to develop and improve internal control mechanisms that are accountable, rational, streamlined and dynamic, and to improve our CSR performance and achieve sustainable growth.



Internal Control and Risk Management System

The Company established an internal control system in 2003 in compliance with internal control regulations. This was completed in 2005. Since its official launch in 2006, the Company has passed the internal control audit performed by external auditors for six consecutive years. This system of internal control has improved the Company's ability to manage and control its operations, strengthened its centralized management system, and helped regulate a wide range of business activities. All in all, the Company's capabilities in risk prevention were greatly

strengthened. The internal control system has played an important role as a part of the Company's corporate governance framework to drive the shift from a macro, department-focused approach to a micro, position-/procedure-focused approach. This resulted in remarkable improvements in the Company's capability in business management.

In 2012, the Company was ranked 1st in the Internal Control Index of China's listed companies on the Shanghai Stock Exchange. It implemented a series of internal control initiatives to broaden the internal control system, mitigate major risks, oversee professional procedures and improve audit quality. We further strengthened

existing internal control and risk management systems for our domestic and overseas operations, stepped up our comprehensive risk management approach to monitor and mitigate risks. Business processes were further streamlined for more effective enforcement. Internal control tests were conducted to assess the effectiveness of these measures.

Anti-corruption System

With an anti-corruption system in place, the Company has created a unique anti-corruption system that is compatible with that of a modern enterprise. In 2012, as part of a fundamental anti-corruption education initiative, the Company released the

Anti-corruption Education Guide, Manager Training Program and Code of Ethics for Executives while improving its business and management procedures, especially the monitoring mechanisms for key areas such as investment management, project management, procurement, bidding and tendering, and marketing. We strengthened the supervision of executives, key projects and overseas operations, and reviewed our decision-making procedures in terms of key issues, executives, investments and the large funds. Irregularities, violations and fraud were investigated and disciplinary measures meted out.

 Please visit <http://www.petrochina.com.cn> to learn more about our corporate control system.

4. Protecting Shareholder Interests

Following the principles of justice, fairness and openness, the Company has complied with legal procedures at home and abroad to ensure that our stocks are traded under a market-driven system to protect the interests of our shareholders, including small investors.

Information Disclosure

The Company makes adequate and timely information disclosure under the HKEx, NYSE and SSE listing rules and follows the disclosure procedures set out in the *Articles of Association*, the *Board of Directors' Handbook* and the *Rules of Procedure for the Supervisory Board* to ensure the information to the market and regulators is disclosed in a timely, accurate, complete and reliable manner. An information disclosure committee comprising the CFO, VP and the corporate secretary is responsible for disclosing information in a timely and accurate manner. The Company has developed its information disclosure rules in line with the requirements set out in CSRC's *Regulations on Information Disclosure of Listed Companies*, covering the procedures for reporting, communicating, reviewing and disclosing material matters.

The Company published its prospectuses, offering memorandums and listing announcements in line with the applicable laws and regulations in the jurisdictions where the Company is listed, as well as the provisions listed in *Articles of Association*. Annual reports, 20-F Form, interim reports and quarterly reports have been published regularly. The Company released its first *Social Responsibility Report ("Sustainability Report")* in 2006. The *Sustainability Report* covers information on the development of our technology, safety, clean energy, energy-saving, environmental protection and governance performance.

Investor Relations

Investor relations is of strategic importance to PetroChina. The Company has developed *Rules and Procedures for Managing Investor Relations*, *Contingency Plan for Managing Market Crises* and *Capital Market Handbook* to clarify the roles, responsibilities and procedures to ensure investor relations are managed effectively and efficiently.

The Company has maintained good relationships with its investors, which in turn, helps to enhance its corporate value and

reputation. We take the initiative to meet financial analysts and fund managers and help the capital market better understand the Company's management, operating results, management approaches and growth strategies, while fostering confidence and trust. On the other hand, we give investors the opportunity for site visits to better understand the industry as well as the Company's daily operations.

The Company maintains a good working relationship with the capital market and the media. With an active publicity strategy, we publicize the Company's operating results and growth strategies through objective media reports. We continue to improve our website design with new columns and updates, and introduce interactive features such as "Investor FAQs" to respond to investors' questions raised as well as solicit shareholder opinions. Meanwhile, we engage financial PR firms on a retainer basis to extend our information channels and monitor the capital market closely. This enables the directors from the Board to obtain market information quickly, accurately, completely and systematically.

Investor FAQs



We place a high premium on protecting shareholders' interests. We invite individual shareholders to attend the AGM to give minority shareholders an opportunity to engage the Board of Directors and executive managers. We also document every opinion and suggestion from shareholders and channel them to relevant departments. We welcome shareholders' requests for visits and as we believe it is a good opportunity to enhance their understanding of the Company.

PetroChina made the list of "Asia's Top Companies in Investor Relations" by *IR Magazine*. In a survey jointly conducted by SSE, SZSE and the China IR Management & Research Center of Listed Companies, the Company was ranked among the top 100 A-share Companies in investor relations, and received the CSR Contribution Award. Mr. Li Hualin, Vice President and secretary of the board, was awarded the Excellent Secretary of the Board in the 2011-2012 appraisal by the Shanghai Stock Exchange. As the only winner from Mainland China in the past 25 years, Mr. Mao Zefeng, PetroChina's *IR manager* & senior assistant secretary of the board, was selected by *IR Magazine* as one of the twenty-five leading IROs. Mr. Wei Fang, a board secretariat official, was voted the Best IR Professional in the oil and gas industry by the buy-side in a survey conducted by *Institutional Investor*.

Connected Transactions

PetroChina signed a series of agreements on connected transactions with CNPC, including *General Agreement on Provision of Products and Services*, when it became public. The connected transactions between PetroChina and other related parties are also conducted in line with regulatory requirements, subject to the approval of independent shareholders. A third-party financial review and an independent view from the independent directors are required for any activity involving connected transaction to ensure the deal is settled at a fair and reasonable price. In addition, it is our policy to minimize connected transactions and avoid conflicts of interest.



Case Study Three reverse-roadshows in 2012

To strengthen relationships between the Company and its investors, and help the capital market better understand PetroChina, the Company organized reverse-roadshows for fund managers and analysts from 13 investment institutions and research groups to visit the Changqing Oilfield and West-East Gas Pipeline Shanghai Project. In response to the capital market's strong concern in the significant production increase for Changqing Oilfield, the Company arranged a reverse-roadshow to Sulige and Yulin so that investors could have a better understanding of the tight gas operations in Sulige Field and the future prospects of the business. The fund managers and analysts then visited the Shanghai Pipeline Control Center – a part of the First West-East Gas Pipeline – where they acknowledged the soundness of the Company's business strategies for gas pipeline and downstream activities.

In July 2012, we invited fund managers and analysts from 12 institutions to visit the Southwest Oil and Gas Field and Guangxi Petrochemical to learn about the Company's business strategies in Southwest China. The group visited the Chuanzhong Oil and Gas Field, natural gas purification facilities, gas distribution

facilities, Shunan Gas Field, Guangxi Petrochemical and Qinzhou Oil Dock. This reverse-roadshow gave the investors a first-hand insight into the reserve base and the advanced natural gas purification techniques used in Southwest Oil and Gas Field. Additionally, the investors were able to tour the modernized, efficient and garden-like setting of the refinery plant in Guangxi Petrochemical. The investors were impressed by our rigorous HSE practices.

In late September 2012, 25 investors visited Xinjiang Oilfield and PetroChina Kazakhstan. It was the first reverse-roadshow outside China and the largest in scale. A Vice President of PetroChina met with the investors in Beijing before the visit. After visiting the oil and gas production sites of Xinjiang Oilfield and being briefed about the exploration and development prospects, investors gained a better understanding of the management procedures and digital initiatives of Xinjiang Field. Meanwhile, they were very positive on the reserve prospects given the under-explored status of the Junggar Basin, a part of Xinjiang Oilfield.



Case Study Managing conflict of interests

After acquiring a 100% indirectly-owned stake in Sun World Limited from CNPC through an offshore affiliate, PetroChina, which became a controlling shareholder, held a 56.66% stake in CNPC Hong Kong Limited, further reducing the potential conflict of interest between PetroChina and CNPC. Meanwhile, PetroChina continues to acquire refining and petrochemical assets and service stations from CNPC, a controlling shareholder of PetroChina, to continue minimizing the possibility of conflict of interests.

The Company completed the acquisition of Jilin Petrochemical, Liaohu Jinma and Jinzhou Petrochemical after the Board of Directors reviewed and approved the resolution of "Proposal for Acquiring Full Control of Listed Subsidiaries with a General Offer and Authorization for Going Through Relevant Formalities". The

acquisition was a win-win situation for investors, PetroChina and the three listed companies. The takeover provided a perfect solution to mitigate the conflict of interest and connected transactions between PetroChina and these three companies. Meanwhile, the takeover also aided resources allocation and market planning, while heralding a flatter organizational structure. PetroChina's corporate image in the capital market has been reconciled to the Company's commitments made when it went public. In addition, this takeover was a highly experimental and exploratory move, as it "created a precedent for China's capital market" and "marked a historic milestone in aligning China's capital market along market-oriented and regulated M&A practices."

5. Engaging with Stakeholders

Gaining our stakeholders' trust and support is fundamental to us building a sustainable business. We are dedicated to improving quality and efficiency to maximize our long-term value. We are also committed to delivering significant achievements to our stakeholders so as to maximize the common interests of both the Company and the stakeholders, and thereby achieve harmonious and mutually beneficial growth.

Ethical Business Behavior

We treat our business partners, customers, suppliers, contractors and competitors 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 cash, marketable securities or any gift or entertainment of an illegal or inappropriate nature, no abuse of one's position in signing business contracts for personal gain or other illegal or immoral benefit, no disclosure of insider information, and no insider trading. Moreover, we never conduct, participate in or support money laundering of any form.

Fair Competition

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 trade activities, 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, etc. On the contrary, we respect the principles of openness and transparency in the bidding process, only obtain information that is publicly available or can be acquired through legitimate means, and stay out of any activity in violation of trade bans or import/export controls.



Stakeholders	Communication Approach	Key Actions
Governments	(1) Participate in discussions on formulation of policies, regulations and standards, and offer company expertise; (2) Attend to public concerns and improve corporate behavior; (3) Launch strategic cooperation with relevant departments; (4) Attend seminars and forums.	(1) Behave legally and ethically, and abide by the applicable laws and regulations in the jurisdictions where we operate; (2) Stabilize oil and gas supplies; (3) Pay close attention and play an active role in policy discussions on climate change, energy conservation and emission reduction; (4) Promote local employment and cultivate local talents; (5) Pay taxes.
Shareholders	(1) Fulfill requirements on statutory information disclosure; (2) Roadshow activities; (3) Issue reports and announce results performance on a regular basis; (4) Launch an "Investor FAQs" mailbox to receive public opinions.	(1) Operate in a responsible manner to maintain a good reputation; (2) Convene annual general meetings; (3) Equal treatment of shareholders, and value opinions of both small and medium-sized shareholders; (4) Hold dialogues with investors and shareholders in various ways.
Employees	(1) Employee representatives in the Supervisory Committee; (2) The establishment of trade unions at all levels; (3) Convene employee representatives' meetings; (4) Organize employee training programs; (5) Set up a complaints and feedback system.	(1) Develop employee knowledge and skills and organize vocational skill competitions; (2) Conduct occupational health checks; (3) Promote local employment in overseas operations; (4) Strengthen grassroots connections and provide a career development platform for employees; (5) Protect employee safety in overseas operations.
Consumers	(1) Carry out activities to protect consumers' interests; (2) Publicize commitment to quality services; (3) Provide hotline services; (4) Conduct customer satisfaction surveys.	(1) Strengthen quality management; (2) Hold a Quality Month activity; (3) Develop an appraisal methodology for the quality management system; (4) Launch activities such as "Serve the public and strive for excellence" to improve service quality at service stations; (5) Provide a "Rapid Oil Change" at service stations; (6) Increase the supply of clean fuel, such as natural gas, high-standard gasoline and diesel; (7) Secure oil supplies for disaster relief and agricultural production.
Business partners	(1) Hold tender meetings; (2) Hold large cross-border business negotiations and technical exchange meetings; (3) Use the electronic trading platform; (4) Engage in managerial practices and technical standards sharing; (5) Conduct contract negotiations and routine meetings; (6) Hold training for business partners; (7) Conduct daily operation meetings.	(1) Use www.energyahead.com as a transaction platform and strengthen centralized procurement management to provide suppliers with equal opportunities and establish PetroChina's strategic supplier system; (2) Enhance communication and coordination with contractors and strengthen the HSE management of contractors by creating a safe and healthy working environment; (3) Improve security measures and the emergency response network; (4) Promote open investment.
NGOs	(1) Share the Company's experiences; (2) Participate in NGO activities; (3) Promote international communication.	(1) Attend the Global Compact Leaders Summit and UN Global Compact China Leaders Forum, and submit a progress report to the forum; (2) Attend to external concerns through various forms of communication; (3) Play an active role in participating and supporting international environment standardization; (4) Participating a wide range of forums and conferences; (5) Organize the first Annual Meeting of the International Standardization Organization's Coal Seam Gas Technology Committee (ISO/TC 263).
Communities	(1) Hold dialogues with local communities; (2) Organize community visits; (3) Conduct social and environmental impact assessments; (4) Promotion of education; (5) Increase information disclosure.	(1) Participate in disaster relief and reconstruction, and provide financial support for education and poverty alleviation; (2) Support and drive local economic growth through large projects; (3) Supply clean energy, e.g. natural gas, to remote regions; (4) Hold volunteering activities among employees; (5) Procure locally, where the business is carried out; (6) Provide job opportunities and training for the local community.

1. Consolidating Resource Base

Oil and gas resources are essential for building supply capacity and the foundation for our sustainable business growth. Thus, oil and gas exploration and production is our top priority. Faced with the challenges in exploring and developing remaining reserves constrained by economically marginal reservoirs that feature low-permeability, ultra-thin, heavy and super-heavy oil, we have been adhering to our strategy to increase resources and have implemented our reserve-growth peak initiatives to consolidate the resource base.

Fast-growing Domestic Oil and Gas Reserves

In 2012, we continued to implement the reserve-growth peak initiatives focusing on oil pre-exploration, risk prospecting and natural gas exploration, and have achieved a number of major discoveries and breakthroughs in key target areas, such as the Tarim, Sichuan, Junggar and Qaidam basins. Our reserve replacement ratio has been above 100% for 13 consecutive years, according to an independent third-party review. Meanwhile, we have made progress in oil and gas exploration techniques, especially regarding lithological, foreland and mature fields to support the expansion of our reserves.

Domestic Crude Output at Record Highs in Recent Years

In 2012, we further promoted our Oilfield Development Year campaign, focusing on waterflood and fine description of our mature reservoirs. The building of our smart fields also proceeded in an orderly manner. Thanks to a scaled application of our technologies, such as multi-stage fracturing for horizontal wells, polymer flooding and Steam Assisted Gravity Drainage (SAGD), the natural decline rate and the increase in water cuts were remarkably lower in our mature fields. Our full-year domestic crude output was over 800 million barrels, marking the highest growth rate, i.e. 2.4%, in recent years. In our Daqing Oilfield, in particular, crude production has been over 40 million tons for 10 consecutive years. In our Changqing Oilfield, meanwhile, our total output exceeded 42 million tons of oil equivalents, ranking first in China.

Steady Growth in Domestic Natural Gas Production

In 2012, we enhanced our production management in key gas areas, major fields and high-yield wells, and further optimized our operations to boost our natural gas production capacity, especially at the Sulige Oilfield in Changqing, and the Dabei and Keshen Oilfields in Tarim. Our extensive use of 3D seismic technology was also very useful in our natural gas development. Domestically, we produced 2.42 trillion cubic feet of marketable natural gas, an increase of 6% year-on-year.



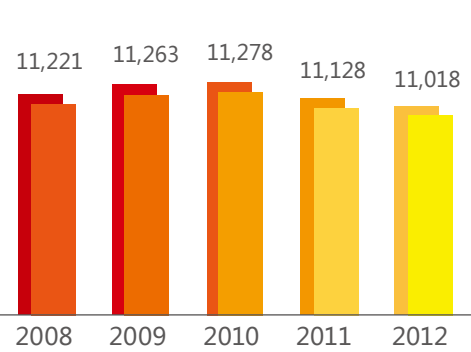
Discoveries and breakthroughs were made in key target areas.

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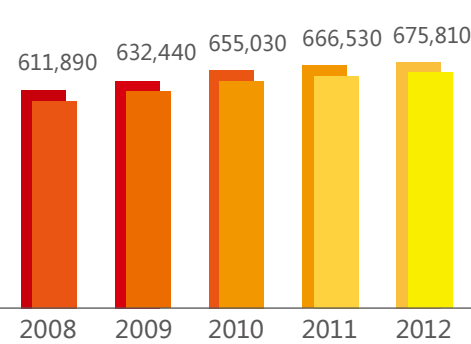
SUSTAINED ENERGY SUPPLY

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. We strive to enhance our energy supply capabilities and optimize our production structure so as to provide safe, reliable, clean and high-quality energy for socio-economic development.

Proven Crude Reserves (10⁶ barrels)



Proven Gas Reserves (10⁸ ft³)



Case Study Technology enabling Daqing Oilfield to maintain a steady output

In service for more than half a century, Daqing Oilfield is faced with a high total water cut and high recovery percentage for recoverable reserves. In 2012, we continued to implement an enhanced oil recovery initiative there, focusing on fine-designed waterflooding supported by three techniques: the efficient testing and allocation of water injection wells, the subdivision of water injection, and automatic downhole injection and/or distribution. Polymer flooding techniques were optimized to make oil displacement more efficient. A technical package for ASP flooding was developed. Massive fracturing for horizontal wells and multilayer fracturing for vertical wells were also introduced to develop peripheral fields. In particular, our Stable Production Solution received the Grand Prize of National Scientific & Technological Advancement. Despite a high total water cut and high recovery percentage for recoverable reserves, the Daqing Oilfield's full-year crude output reached 40 million tons, marking its 10th consecutive year of stable production.



Case Study Technological innovation driving production growth at Changqing Oilfield

Changqing Oilfield's reservoirs are of low permeability, pressure and abundance make it quite challenging to access its huge reserves. Since 2008, a range of key technological innovations and research has been launched, giving birth to 12 techniques for the efficient development of tight gas and 5 technical methodologies for the mass development of tight oil. Thus, efficient development at the Sulige tight gas field and Huaqing tight oil field has been achieved, representing an annual output growth of up to 5 million tons of oil equivalents. In 2012, Changqing Oilfield's total output exceeded 42 million tons of oil equivalents, including more than 22 million tons of crude and more than 29 billion cubic meters of natural gas, accounting for one-ninth and one-fourth of China's total outputs, respectively.



2. Optimizing Positioning of Refining and Chemicals Facilities

A strategic approach to positioning of refining and chemicals facilities of PetroChina is under way both to address the issue caused by the uneven regional distribution of China's refining and chemicals capacity (resulting in the need to transport oil products from north to south and west to east) and to meet the growing market demand for high-quality oil products.

In 2012, a range of expansion and upgrade projects were carried out on schedule, including Fushun Petrochemical (refining and ethylene), Daqing Petrochemical (ethylene), Hohhot Petrochemical (refining), etc. Moreover, Sichuan Petrochemical is basically ready for operation and the construction of Guangdong Petrochemical has commenced. R&D in refining techniques also saw new advances. The proprietary 600Kt/a ethylene package solution was successfully applied in the expansion and upgrade of large ethylene projects. As of the end of 2012, an optimized layout of our refining and chemicals operations has taken shape, comprising seven 10Mt/a refining bases and five ethylene production bases.

3. Accelerating Construction of Pipeline Network

We keep expanding our oil and gas pipeline network to boost our capabilities in transportation and allocation. Thus, the oil and gas needs for civilians, public utilities and key industrial users are guaranteed.

Improved Domestic Pipeline Network

The trunk and all eight branches of the Second West-East Pipeline were completed in 2012, which is ready to deliver natural gas to the HKSAR. The Third Shanxi-Beijing Pipeline was also completed, adding new capacity to the existing gas supplies to northern China. The Third West-East Pipeline has commenced construction and the Yining-Horgos section of China's first large-diameter SNG pipeline has been completed. The north section of the Zhongwei-Guiyang Pipeline is now in operation, increasing gas supplies to the Sichuan and Chongqing regions. The Tieling-Fushun Pipeline has been expanded to transport more crude oil feedstock to Fushun Petrochemical. The crude oil transmission network in



7

seven 10Mt/a refining bases

5

five ethylene production bases

northwestern China has also been further improved with the Lanzhou-Chengdu Pipeline now largely completed and the Changqing-Hohhot and Dushanzi-Urumqi Pipelines in operation.

Diversified Source Import Channels

In 2012, we continued to broaden access to overseas oil and gas resources by accelerating the construction of cross-border pipelines and new LNG terminals. The phase I project for Jiangsu LNG terminal was put into operation and Dalian LNG terminal completed its first loading task, while construction of Tangshan LNG terminal progressed smoothly. These LNG terminals create offshore gas import routes, enabling peak shaving and steady supplies in Yangtze River Delta and northeastern and northern China regions. With Lines A and B of Central Asia-China Gas Pipeline fully completed and Line C under construction, natural gas was also imported and delivered to users in Zhujiang River Delta region.



Jiangsu LNG terminal in operation

Social capital was encouraged to participate in our construction projects. The Third West-East Gas Pipeline, running from Horgos in Xinjiang to Fuzhou in Fujian with a total length of 7,000 kilometers, is an example of our cooperation with both private and social capital. After its completion, the pipeline is expected to deliver 30 billion cubic meters of natural gas from Central Asia per year. The Company and Yanchang Oil Administration Bureau have jointly founded Yan'an Petroleum Corporation to develop oil and gas resources in northern Shaanxi and the project has commenced operation. A joint venture among PetroChina, the government of Xinjiang and the Xinjiang Production & Construction Corporation has also been established with a plan to operate Karamay's Hongshan Oilfield. We actively work with businesses that have different forms of ownership, setting an important example for reforming the investment and financing mechanisms in state-controlled enterprises. The success of these projects marks a major evolution in the cooperation between state and social capital.



Dalian LNG terminal were in smooth operation.



Feature Story The role of natural gas in building a beautiful China

In recent years, the world has been faced with unprecedented energy and environmental challenges. The international community is showing a growing interest in low-carbon and green development initiatives — with the strategic goal of transforming growth models to promote sustainable development.

Natural gas is a kind of high-quality clean energy, emitting far less CO₂ than coal and oil. At PetroChina, we will accelerate the development of natural gas operations as an effective approach to reducing greenhouse gas emissions, creating a green business and improving the ecological environment for a beautiful China. We currently already provide 70% of the country's total gas supplies, with a pipeline network serving in 28 provinces (municipalities, autonomous regions) and the HKSAR.

Strengthening Natural Gas Exploration and Development in China. Our natural gas E&P activities are mainly in four provinces, i.e. Tarim, Qinghai, Changqing and Sichuan-Chongqing. Domestically, we produced over 2.42 trillion cubic feet of natural gas in 2012. Moreover, we take an active approach to unconventional natural gas development. In particular, we have built a state-of-the-art coal-bed methane (CBM) laboratory and possess a number of CBM-related technology patents.

Actively introduce overseas natural gas resources. We have entered into agreements with our partners in Central Asia, Asia-Pacific and North America to secure gas imports. We have imported mass gas from countries in Central Asia and LNG from Qatar and Australia to continue increasing our domestic gas supply.

Accelerate Construction of our Nationwide Pipeline Network. The Third West-East Gas Pipeline, currently under construction, will be connected to the existing pipelines already operated by the Company. These include the Shaanxi-Beijing Pipelines, Zhongxian-Wuhan Pipeline and the First and the Second West-East Gas Pipelines. This will ensure that major gas-producing areas at home as well as foreign sources of gas import can be completely inter-connected. So far, the West-East Gas Pipelines have transported and distributed over 150 billion cubic meters of natural gas and this has resulted in the proportion of natural gas in China's primary energy consumption to increase by one percent point.

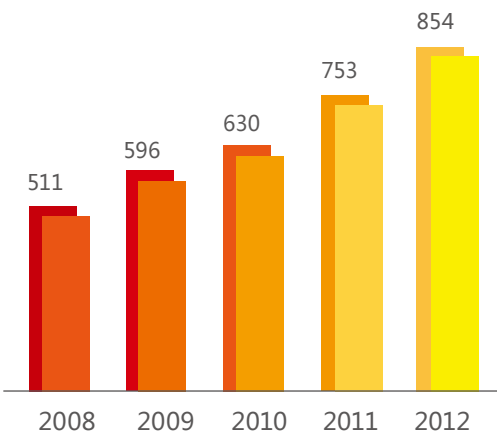
Continue promoting natural gas end usage. In addition to supplying natural gas to urban residents, public utilities and key industrial users, PetroChina also actively promoted the

use of natural gas for power sectors as a replacement to coal. We also work with our partners in Beijing and Chongqing to promote using LNG to fuel both cars and other vessels. So far, we have opened and are now operating about 360 natural gas filling stations, including over 160 LNG filling stations. We have developed over 50,000 gas-fueled cars and over 10,000 LNG buses and heavy-duty trucks nationwide. Currently, there are more than 200 LNG buses running across four lines under a cooperation program between PetroChina and the municipal government of Beijing.



Hong Kong branch of the Second West-East Gas Pipeline has been completed.

Natural Gas Supplies by PetroChina (10⁸ m³)



4. Developing Alternative Energy

In view of a continuous decline of 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.

Continue to Promote the Development of Unconventional Energy

In China, we continue to make efforts in developing unconventional resources such as tight oil and gas, CBM and shale gas. In 2012, we saw substantial progress in the development of tight reservoirs at Changqing Oilfield. Meanwhile, crude output from ultra-low-permeability reservoirs at oilfields including Huaqing oilfield, exceeded 6.9 million tons and natural gas produced at Sulige accounted for more than half of Changqing's gas output. We achieved steady progress in the construction of our CBM demonstration projects in Qinshui in Shanxi Province and Eastern Ordos Basin in Inner Mongolia. Commercial developments were also carried out in Fanzhuang. In addition

to these developments, the Weiyuan-Changning and Zhaotong Projects, in Sichuan and Yunnan respectively, were chosen to be national shale gas demonstration projects. In southern Sichuan, the Ning 201-H1 well showed an initial yield of over 150,000 cubic meters, making it China's first commercially feasible shale gas well. The Fushun-Yongchuan Shale Gas Project in Sichuan, in collaboration with Shell, saw new breakthroughs with Well Yang-201 producing 0.43 million cubic meters on a daily basis during well testing.

Breakthrough Recorded in Technological R&D for Unconventional Energy

In 2012, we made a breakthrough in our reservoir stimulation experiments for tight oil, tight gas and shale gas production. This resulted in the mastering of six development techniques including multi-stage fracturing with composite bridge plugs and multi-bank perforation. These technologies have facilitated the efficient development of our tight oil, tight gas and shale gas resources. Our oil sand project in Canada has also officially entered into development and this marks our first SAGD project outside China.

Substantial progress was made in the development of tight gas at Changqing Oilfield.



5. Extending International Cooperation

We adhere to the principles of “cooperation for mutual benefit and joint development” and comply with 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, and made regular contributions to stabilize the global oil and gas market.

Overseas Energy Development

In 2012, we focused on the exploration and production of our overseas operations and also enhanced our risk management and business strategies research. In Niger and Chad, we achieved a series of new breakthroughs in exploration. The production target of Rumaila Project in Iraq was overfilled and phase 1 of Halfaya Project became operational 15 months ahead of schedule. Aktobe Project and PK Project in Kazakhstan, as well as MPE-3 Project in Venezuela maintained steady oil and gas output. We jointly developed an LNG liquefaction plant project in Canada with other international energy companies and we completed delivery of an upstream unconventional oil and gas project in Western Canada. We signed an acquisition agreement for CBM assets in eastern Australia, for the shale gas and condensate gas project in Canada and purchased a stake in BHP Billiton's offshore natural gas block in Western Australia. These acquisitions have increased our market share in the global natural gas market. The Company's full-year net production from overseas operations was over 136 million barrels.

Promote Cooperation with International Partners in China

While carrying out in-depth cooperation in conventional areas, we have actively promoted joint cooperation in unconventional

areas which include tight gas, CBM and shale gas. In 2012, net production from our domestic foreign cooperation projects reached 4.52 million tons of oil equivalent. A number of key projects saw major progress and the cooperative relationship between PetroChina and some international oil companies such as Shell and Total was enhanced, thereby improving the industries capacity for sustainable development. A new theory jointly carried out by PetroChina and Shell, was applied in the tight gas project sector and it achieved the desired results; the daily output of the Changbei Project exceeded 10 million cubic meters in winter. A series of new concepts and techniques were also successfully used in the South Sulige Project - a project co-developed by PetroChina and Total. The Dagang Zhaodong Project - a joint project between PetroChina and ROC - maintained a crude output of over 1 million tons for nine consecutive years, producing a total of more than 10 million tons of crude oil since its operations in 2003.

Steady Progress in International Trade

In 2012, strengthened our scientific management and enhanced the level of control, we began seeing a steady growth in our trading business in both size and operational efficiency. As a result, we continued the construction of overseas oil and gas operation centers. In particular, our Asian operation center has been building a stronger presence in the market, our European operation center has been operating smoothly, and our American operation center has been under construction.



Steady growth of international trade



Case Study Rumaila Project Helping Oil Exploration in Iraq

PetroChina, BP and Iraq's South Oil Company agreed in 2009 to jointly provide exploration and production services for Rumaila project. In 2010, under the joint effort, the project's production increased 10% ahead of schedule. In May 2011, the project made its first crude payments, making it the first payload-generating foreign cooperation project in post-war Iraq. In 2012, we continued to work closely with the local government and our partners on the project. We operated in compliance with international practices to maintain a steady operation, a sound safety track record and also overfilled our crude production targets. Our efforts have played a significant role in bolstering Iraq's crude output and exports and we achieved a win-win in cooperation between investors and the host country.



03

OPERATIONAL SAFETY

The natural environment is essential for the survival of all life on earth and it has therefore been part of our philosophy to care for people and protect 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 2012, our HSE performance continued to improve through the implementation of a series of initiatives focused on monitoring mechanisms, internal controls, pollution control and emission reduction, education, training and accident analysis.

New Progress in Building a Sound HSE Management System

In 2012, we completed two HSE system reviews of all our subsidiary companies and held two teleconferences to provide coaching to factories which faced major HSE issues. In order to promote the system, workshops and conferences were held to share ideas and experiences and advanced managing experiences were summarized and introduced. Best practices of HSE management approaches were compiled into training materials.

HSE Mechanisms and Accountability

In 2012, a new HSE management framework at the corporate-level was taking shape, which covered PetroChina's health, safety and environmental activities. The Company had signed an “Agreement of Safety and Environmental Protection Responsibilities” with the leaders of its subsidiary companies for six consecutive years. This agreement identified the safety and environmental protection objectives for managers and employees at all levels. Safety and environmental protection meetings and quarterly reviews were held in order to learn about our HSE status and take necessary actions in a timely manner.

Strengthening Monitoring and Supervision

We continued to implement rules and procedures of prevention, investigation and correction, which focus on our main areas, key processes and sensitive periods. Safety hazards and environmental risks were identified and as a result, mechanisms were developed to coordinate risk prevention and control these efforts at all levels. A dynamic risk assessment and reporting system was also improved to strengthen our quantitative analysis, process monitoring and accountability. Relevant basic level risk management tools including HAZOP (Hazard and Operability Analysis) were widely used. Four training sessions were arranged for HAZOP analysts and a HAZOP analysis was also conducted for our existing facilities, expansions and upgrade projects in order to further improve our HSE system.

Accident Management

The Company has published its disciplinary measures for people who are found liable for production safety accidents and environmental issues. These measures have integrated accountability into the design and procurement procedures to further enhance safety and environmental responsibility. An accident investigation center has been established to look into each safety accident. Case-based safety education teleconferences were also held on a quarterly basis and more than 200 thousand employees have been organized to join these conferences. Major accidents for the past ten years have been studied and as a result, the 2006-2011 Statistical Analysis of Safety Accidents report was compiled.

Safety Education and Training

In 2012, we hosted 30 business seminars to share a range of experiences and observations focused on safety-related areas. An HSE training matrix was widely used to help build a demand-driven HSE training model. During our “Safety Emphasis Month”, we also try to enhance the awareness of our staff regarding safety and environmental protection through a series of educational events. These include safety consultations, quizzes, videos and emergency response drills.



Monitoring and supervision were constantly strengthened.

2. Heightening Safety Management



A comprehensive emergency response drill at Longfeng Oil Depot of Northwest Sales Company

We adopt a people-oriented safety management approach focusing on building up safe behavior, accountability and taking precautions. We place operational safety as a core focus of our business model and due to this, in 2012, the number of accidents which occurred and the mortality rate decreased by 50% and 67% year-on-year respectively.

Enhanced Emergency Preparedness

In 2012, the Company released amendments to its pipeline emergency preparedness plan. We continue to carry out "one ordinary and triple important" contingency plans for both the record and our on-site audit work. The contingency plans for our 33 subsidiary companies including Qinghai Oilfield were assessed and registered in both 2011 and 2012. As a result of these reviews, on-site inspections of contingency plans were conducted in eight key subsidiary companies, including Changqing Oilfield and Dalian Petrochemical, as well as some key projects such as the Shenzhen-Hong Kong submarine branch of the Second East-West Pipeline.

In accordance with the *Emergency Response Law*, a comprehensive emergency response drill was conducted at Daqing Longfeng Oil Depot of Northwest Sales Company. This drill tested the

Group's ability to respond to a fire or explosion at the facility. A tabletop exercise was designed to validate the efficiency of our contingency plans for natural gas and pipeline operations. These approaches have been able to broaden the scope of our emergency drills and also standardized the process for all our facilities. During the "Emergency Response Drill Week", a wide range of emergency response drills were conducted, focusing on safety and environmental hazards in front-line operations.

In view of eight major safety hazards and six environmental risks, the Company has researched and designed guiding principles for an effective emergency rescue system. Additionally they have proposed suggestions which include the building of a cross-regional emergency well control framework, improving the existing pipeline emergency rescue system and strengthening offshore oil development project emergency rescue tech research. Apart from these, the Company has actively worked with Sinopec and CNOOC to build an emergency preparedness coordination mechanism, "The Guide for Emergency Rescue Coordination", and detailed rules and procedures which have been formulated to create a smooth coordination mechanism for emergencies.

Fire Safety

In 2012, we continued to foster the professional competence of our in-house fire crews. We published *Guidelines on Preparedness Management for Fire Crews* and *Guidelines on Firefighting and Rescue Management*. These helped with the continued training of our fire crews, improved preparedness plans and standardized equipment management. Workshops were also held for the fire brigade in order to discuss and update skills and tactics for firefighting and rescues, which helped to enhance the abilities of in-house fire teams. The Company has continued to improve its code of practice regarding personal protective equipment and provided its firefighting crews with training courses on HSE management systems. The ability to mitigate fire and rescue related safety risks has been further enhanced through hazard identification, risk assessment and experience sharing. GIS systems have also been developed to strengthen informationization construction of fire service.

Strengthening Traffic Safety Management

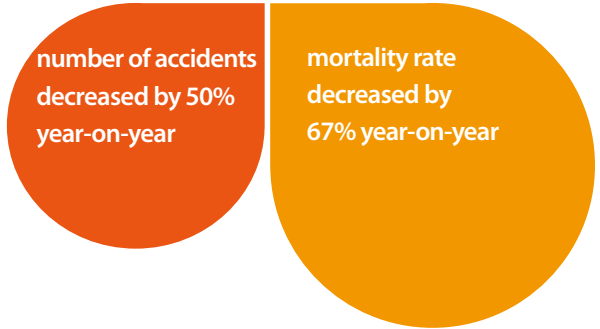
The Company further strengthened its traffic safety management. In 2012, PetroChina promoted its HSE system for road transport management. We published the *Guide for the Application of Vehicle Satellite Positioning System* to standardize the installations and operations of vehicle tracking devices. Training was provided for all staff from the traffic safety department. Moreover, safety guides were developed for truck drivers and drivers transporting freight and passenger, hazardous products and passengers to raise overall skills and safety awareness. No major traffic accidents were reported in the year.

Ensuring Safe Offshore Operations

The Company's offshore operations were carried out in accordance to national requirements as well as laws and regulations under the offshore oil production safety licensing system. Safety measures were designed, built and put into operation at the same time that construction projects were undergoing development. Furthermore, all operations were documented for the purpose of safety management. Training was organized for heads of departments and safety management executives involved in offshore activities. Offshore oil production safety licenses were also reviewed regularly. All projects undergoing construction were subject to risk analyses and risk assessments. Relevant control measures were developed in accordance to all identified safety hazards. Finally, integrated emergency drills for regional offshore operations were conducted to improve the emergency response capabilities of the Offshore Emergency Response and Rescue Center.



Keep safe production in mind.



3. Promoting Energy Saving and Emissions Reduction

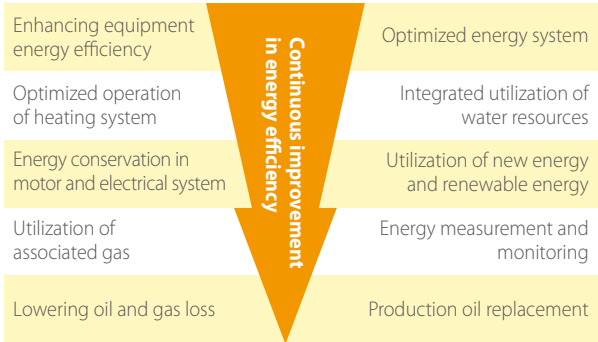
We continued to promote research and development for technologies related to energy conservation, emissions reduction and energy optimization. The Company also moved forwards with both its Ten Energy Saving Projects and Ten Emissions Reduction Projects. In 2012, the Company's energy and water savings were 1.21 million tons and 19.26 million cubic meters respectively, while SO₂ emissions decreased by 0.3%.



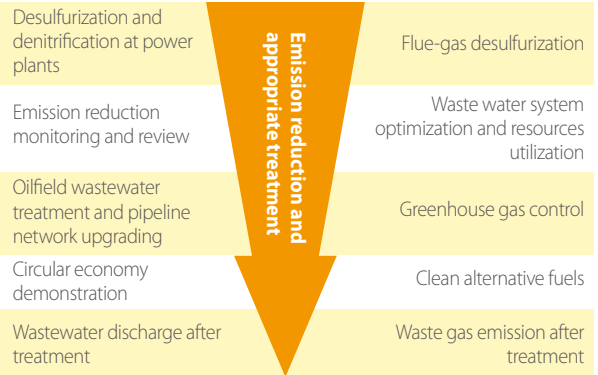
Energy Conservation

We continued to promote our Ten Energy Saving Projects by launching crucial energy saving activities including eliminating and upgrading low-efficiency equipment and restructuring the heating furnace. Steam injection and heat from wastewater were used for heavy oil extraction which saved energy. Furthermore, energy conservation techniques were implemented at pumping units, power distribution boxes and various operations. In total, six energy-saving projects were delivered. Together, they act as a benchmark, forming the technical framework for the Company's energy system optimization strategy. Energy Performance Contracting (EPC), energy conservation tactics, emissions reduction measures and technological renovation initiatives were all implemented at the Tarim Oilfield. Campaigns on energy conservation underscoring the use of low-carbon energy and green development were introduced to raise awareness of the importance of energy conservation. Eleven subsidiary companies, including Daqing Oilfield, were selected by China Petroleum and Chemical Industry Federation (CPCIF) as "Most Advanced in Water Conservation in the Oil and Chemical Industry". Meanwhile, four projects, including Liaohe Oilfield's heavy oil sewage recycling technology, received recognition for "Outstanding Water Treatment Project in the Oil and Chemical Industry".

Ten Major Energy Saving Projects



Ten Major Emission Reduction Projects



Emissions Reduction

In accordance to *Pollution and Emissions Reduction Scheme of China's 12th Five-Year Plan*, the Company carried out key emissions reduction projects. Conferences were convened to identify emissions reduction objectives and contracts identifying emissions reduction targets were signed between the Company's branch offices. Solid progress was recorded for Ten Major Emissions Reduction Projects. In particular, the Company focused on the upgrade of its waste water treatment systems and the fuel-gas desulfurization of its catalytic cracking units. A monthly scheduling system was developed for improving the coordination of key emissions reduction projects and the progress and effectiveness of emissions reduction activities in key business units were audited. Moreover, an online monitoring platform was created to enable real-time data transmission and to generate abnormality warnings from key wastewater and waste gas sources.

In November 2012, the Ministry of Human Resources and Social Security, the National Development and Reform Commission, the Ministry of Environmental Protection and the Ministry of Finance jointly announced a list of the Best Energy Conservation and Emissions Reduction Enterprises / Professionals from the 11th Five-Year Plan Period. The No.3 Production Plant at Daqing Oilfield and the No.4 Production Plant at Jilin Oilfield were named "Best Energy Conservation Enterprises". The Safety, Environmental Protection and Energy Conservation Department at Jilin Petrochemical and the Industrial Water Plant at Kelamayi Petrochemical were named "Best Emissions Reduction Enterprises". As well, Huang Xinmei, a senior engineer from the Safety, Quality and Environmental Protection Department at Dushanzi Petrochemical was named "Best Emissions Reduction Professional".



4. Environmental Protection

We attach great importance to minimizing environmental impacts throughout the entirety of our operations. In particular, the Company focuses on areas in which oilfields or gas fields are under operation or zones in which pipelines are located. This helps The Company coexist in harmony with the environment.

Environmental Risk Management

In 2012, we conducted a comprehensive review of safety hazards in areas such as exploration and development, oil refining and petrochemicals, environmental risks (such as oil and gas spills) and emissions and waste discharge management. The Company also developed a multi-tiered risk management mechanism which was managed by key staff at the Company's headquarters. For each construction project, environmental impact assessments were conducted and a general environmental management plan was implemented. Preliminary environmental impact assessments were required in certain experimental pre-EIA projects. In these cases, a series of risk management measures were taken to eliminate pollution and to protect the environment.

Environmental Risk Monitoring

From June to September 2012, we conducted the 100-Day Environmental Safety Inspection, an initiative involving an



An emergency response drill on environment protection

environmental impact assessment, the compilation of a dynamic environmental risk evaluation database, the implementation of management standards for water pollution control facilities, and overall environmental risk management for ecologically sensitive areas. A skills competition was held to determine the abilities of staff to handle monitoring responsibilities following an emergency oil spill. An emergency response drill was enacted to simulate a hydrogen sulfide leak and the proper monitoring procedures that would follow such an accident. Nine environmental monitoring centers participated in this event.



Case Study Tropical rain forests protection in Andes project

PetroChina's Andes Project is located at the Amazon Basin, where over 90% of terrain is dominated by tropical rainforest. Throughout its business operations, PetroChina has always attached great importance to environmental protection. In fact, The Company has taken a series of measures to minimize the footprint it leaves on the planet. Some of its activities include dynamic environmental monitoring, environmental restoration, integrated environmental protection and environmentally-friendly wastewater treatment management.

During the project's preliminary stage, helicopters were used to inspect sites in order to avoid damage to the rainforest. Drill sites were also established in a limited and pre-defined area. Once the operation was under process, horizontal wells and wastewater reinjection techniques were constructed to minimize the impact of emissions on the land and the environment. Finally, the



5. Addressing Climate Change

As a responsible energy company, we 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.

Greenhouse Gas Emissions Reduction Initiatives

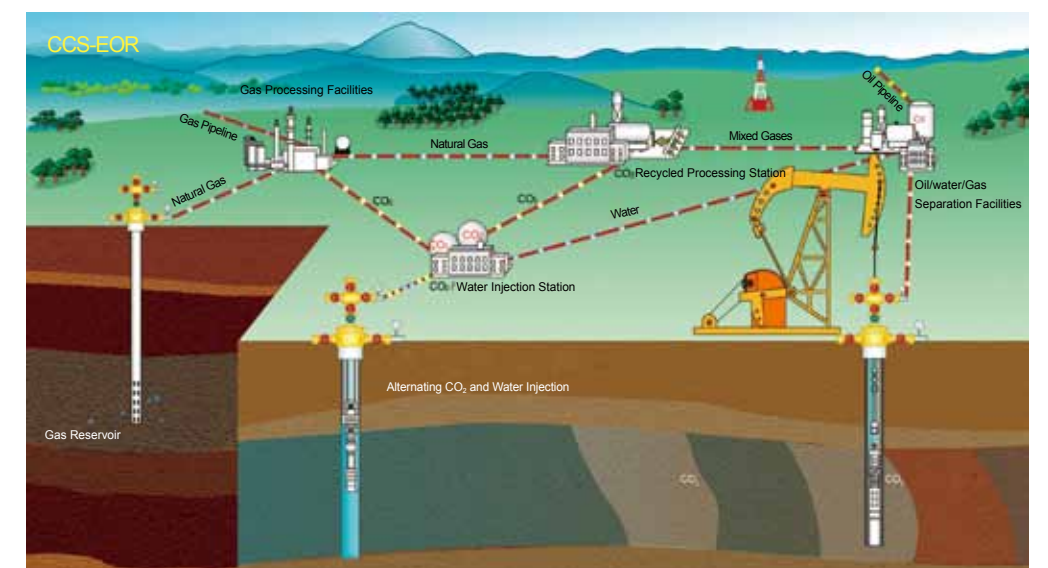
In 2012, PetroChina and CNPC participated in the UNFCCC Climate Change Conference in Doha. Together, they gave a presentation titled "Low-carbon Development in China's Oil Industry" at the China Pavilion. PetroChina shared with its international peers its insights, concepts, solutions and techniques for improving energy conservation, emissions reduction, and low-carbon energy development. PetroChina's affiliate, Tianjin Climate Exchange, worked with a number of financial institutions including Shanghai Pudong Development Bank, Industrial Bank, as well as China Energy Conservation Service Industry Committee (EMCA) to provide a financing platform for companies engaging in energy conservation services. The Company played an active role in facilitating a wide range of discussions on China's *Climate Change Response Act*. Its contributions fell in areas such as conceptual design, social participation, legal responsibility and international practices. Additionally, the Company grew a 13.3-hectare carbon sink forest at the National Engineering Technology Innovation Base, Changping District, to support the afforestation project by the Beijing municipal government.



Solar energy is widely used in Tarim Oilfield.

R&D on Reducing Carbon Emissions

In 2012, we achieved major progress in the research and development of reducing carbon emissions and deriving low-carbon operations techniques. Improvements in the technologies of wastewater treatment and oil sludge treatment as well as a 10 percentage points increase in the recycling rate of wastewater recycling were among a few of the Company's achievements. Research on CO₂ flooding and sequestration techniques were reviewed and approved. Meanwhile, Jilin Oilfield saw the completion of China's first model project for high-CO₂ gas fields development, CO₂ emissions reduction, CO₂ flooding and CO₂ sequestration.





04

"CUSTOMER-FIRST" MARKET SERVICE

Petrochemical products play a vital role in China's national economy as well as in the lives of Chinese people. The Company pursues a business where the "emphasis is placed on the environment, safety, quality and people". It also adheres to a principle of "honesty and quality excellence". In this respect, the Company actively pursues its goal for turning out products that have "zero defects", "zero accidents", and are of "leading first-class quality both domestically and internationally". We try our best to provide clean, qualified and diversified products generated through strong management and technological innovation. In this way, we can guarantee the delivery of satisfactory services to our customers.

1. Enhancing Quality Management

At PetroChina, quality is always a top priority. We strictly regulate product quality and standardize management to better fulfill our responsibility as a major petrochemical producer and supplier. In 2012, under *State Council's Quality Development Program (2011-2020)*, we developed a plan to enhance our quality management system, to strengthen measurement and testing capabilities.

Well-established Quality System

We developed and implemented a quality management system titled the *Promotional Plan for Building Quality Management System* in order to facilitate the formulation and certification of quality management systems at all of the Company's subsidiaries. In 2012, 32 subsidiary companies were reviewed to ensure that their quality management systems were effective. We also raised investments in laboratories and inspection equipment, and reinforced quality control measures in our production and marketing processes. Quality supervision was strengthened through products spot checks. Lanzhou Petrochemical's QC team was granted the title of "Quality Benchmark of the Year" in the petroleum and petrochemical sector for its achievements in quality assurance.

Enhancing Measurement Level

In 2012, we accelerated the inspection of subsidiary companies' metering instruments and upgraded a total of 120,000 units. We continued to regulate oil and gas transfer measurements, coordinate tests and measurements for cross-border oil and gas pipelines, inspect measurement facilities and transfer measurement parameters. China's most sophisticated natural gas metering system at the Nanjing metering station of the West-East Gas Pipeline was put into use to ensure reliable and accurate measurements in the oil and gas trade.

Achievements in Standardization

In 2012, a clearly defined set of standards and operating procedures were developed for both research results and management experiences. Workshops were organized to address issues in developing and amending standards and improving management standardization. Throughout the year, we developed and modified 166 corporate standards, all of which were effectively implemented. Subsidiary companies were also inspected to ensure product quality.



120 thousand units
upgraded 120,000 units
of metering instruments

166
developed and modified
166 corporate standards



Case Study Total quality management for premium oil products

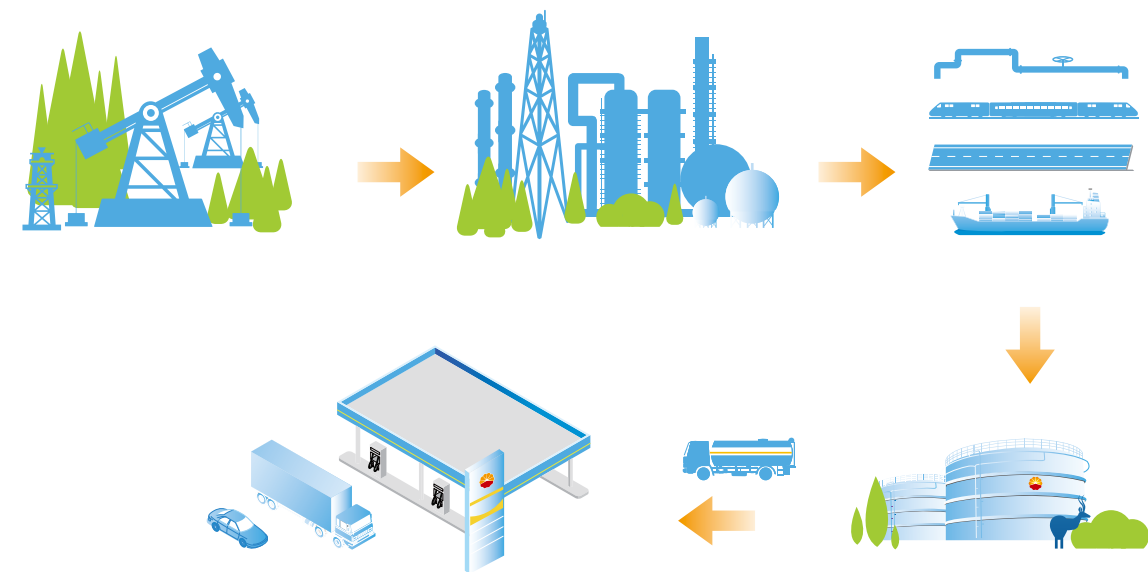
As the automobile becomes a daily necessity in China, the quality, quantity, and safety of oil products have taken on greater significance for consumers. PetroChina's production and sales of oil products are centered on these three "red line" items of "quality, quantity and safety".

Refineries strengthen meticulous. Our refineries adopt a meticulous approach to managing operations in complying with national and industrial standards for crude oil processing. We maintain strictly-controlled processes to make products of high quality which meet high standards. All refined products are tested with a quality certificate required for their release for sale. To ensure the reliability and accuracy of factory inspections, we have upgraded our testing equipment and introduced new testing items.

Oil depots strengthen strict management. Oil products are sorted by different categories, grades and quality designations after inspection and then transported to oil depots by using

specific pumps, pipelines, tanks and vehicles, to prevent confusion among different products. At oil depots, oil products are handled and stored by product categories, grades and quality designations and tested regularly to prevent spoilage. To prevent contamination during transportation, products that do not conform to specifications are not allowed to be added into tanks and delivered to end users.

Sales strengthen quality control. When oil products arrive at service stations, density inspections are carried out to ensure they meet the requirements set out in national standards. To ensure accurate meter readings, we work with technical supervision agencies to periodically check our fuel pumps, and withdraw from service any with an error rate below the national standard. As part of our quality supervision program, all our refineries and marketing companies have passed GB/T19001 quality management system certification by a third party.



2. Focusing on Research and Development

In line with our technological philosophy of "Strategy-Driven, Goal-Oriented and Top-Tier Design", we executed our innovative strategy to implement the three core projects in innovative technology. In addition, we continued to focus on science and technology projects at both company and national levels, sparing no efforts to make key technological breakthroughs. To ensure a steady stream of funds for scientific research, we strengthened our R&D in new technologies, processes, equipment and materials, upgrade our production facilities and carry out product innovation based on market demand, to offer customers more varied, quality products.

In 2012, we developed more than 80 types/brands of new chemical products which accounted for a total volume of over 800,000 tons. We successfully resolved major technical bottlenecks in nitrogen fertilizer production which enabled 98% of the key equipment to be produced domestically. The first set of technical process that uses natural gas as a raw material with package of 450Kt/year synthetic ammonia and 800Kt/year urea plant has been successfully developed and applied on Ningxia Petrochemical's fertilizer project. The development of catalytic cracking catalyst presented a breakthrough, and the hydrocracking catalyst underwent a successful trial under an industrial application for the first time. Clean gasoline production and diesel oil production technologies meeting national IV emission standards have become key considerations for the Company when upgrading the quality of its oil products.

In addition, two projects, "Method for Preparing Highly Chlorinated Polypropylene" and "Method for Preparing Dodecyl Oleate", were granted the national invention patents. The project "Research on and Industrial Application of Premium Motor Oil Additives" won the 2nd prize in National Awards for Scientific and Technological Progress. The project "Integrated Technologies for 50Kt/a NBR Unit" won the 2nd prizes at National Awards for Scientific and Technological Progress in Energy. Application of these technologies will offer customers more environment-friendly, energy-saving, and durable chemical products.

Newly Developed Refined Products in 2012

Name	Description
RP340N Polypropylene	It is tougher, more flexible and balanced with better transparency and gloss, allowing it to be widely used in the manufacture of thin-walled products with high transparency, such as containers of food, cosmetics and drugs.
EP548N Polypropylene	It features high strength, high modulus, high impact strength and high gloss, allowing it to be widely used in the manufacturing of appliance housing, electric appliances, grocery containers, cleaning devices, hotel carts as well as industrial vacuum cleaner housing and billboards, etc.
DNDC-7148 Ethylene-hexene Copolymer	It is used for hollow containers, industrial barrels, chemical tanks and storage containers for outdoor uses.
2320D Polyethylene Membrane	It is characteristic of high transparency and high strength, and used in the manufacture of packaging materials.
HF-7042 Ethylene	It has better light transmission and extensibility.



Case Study Karamay Petrochemical developed its special machining strategy

The main raw material used at Karamay Petrochemical is naphthenic heavy oil, a high-acid, high-calcium crude oil with a high viscosity, making it difficult and costly to process. Through its R&D efforts, the company has developed a series of processing techniques and catalysts and received more than 30 patents. With a wide range of naphthenic products, including rubber oils and electric oils, the company has become the largest producer of naphthenic lubricants in China and a major producer of heavy duty asphalts and low-pour-point diesel for key roads in northwestern China. The company is a leading supplier of white rubber oils and refrigerator oils in the world by market share, with a number of products including rubber oils winning the National Customer Satisfaction Award. In February 2012, the project of "Research on and Industrial Application of the Techniques for Manufacturing High-grade Products with Naphthenic Heavy Oil" in Karamay Petrochemical won the first prize in the National Awards for Scientific and Technological Progress.

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 automobile, building materials, electronics, pharmaceuticals, printing, household appliances and daily-use chemicals.

Continuous Upgrading of Oil Products Quality

In 2012, we continued to upgrade the quality of our refined oil products to ensure all automobile fuels, i.e. gasoline and diesel, meet the National III emission standards. The proportion of high-grade gasoline reached 98.4%, 1.7 percentage points higher than last year. In particular, the output of 97# gasoline and jet fuels increased 30.8% and 30.3% respectively year on year. In support of Beijing government's call for high-grade oil products and cleaner air, we replaced six oil depots (700 oil tanks) and more than 190 service stations with Beijing V standard oil products. Jinzhou, Huabei and Liaoyang Petrochemicals completed their production targets for the Beijing V car fuel on schedule, with a total output of more than 1.3 million tons.

Promoting End-User Consumption of Natural Gas

In 2012, we continued to promote the end-user consumption of natural gas in the Bohai Rim, Yangtze River Delta and Sichuan-Chongqing regions. We promoted LNG as an alternative for vehicle fuel, and also provided a steady and reliable source of fuel and products for LNG's vehicle to enhance public transport in Beijing, Chongqing and Hebei etc. Meanwhile, we accelerated the construction of LNG filling stations as well as LNG storage facilities and transportation. We signed cooperation agreements with the governments of Guangzhou and Hefei to provide high-quality

natural gas for industrial and residential facilities, to promote local socio-economic development.

Providing Quality Chemical Products

We constantly strive to develop new chemical products and give consumers a wide range of high-quality and environmental-friendly solutions. In 2012, we supplied more than 24 million tons of chemical products. Five of our products, i.e. fully refined paraffin wax, petroleum benzene, heavy duty asphalt, butadiene rubber and polyacrylamide, were awarded the "Distinguished Brand" status in China Petroleum and Chemical Industry. The urea, resin and rubber and chemical products from Lanzhou Petrochemical achieved a 100% compliance rate as determined by the General Administration of Quality Supervision. The large-particle-size and small-particle-size urea of Ningxia Petrochemical had a first-grade rate of 99.93% and compound fertilizers had a compliance rate of 100% in factory inspection.

Liquefied natural gas (LNG), composed mainly of methane, is natural gas that has been converted to liquid form at -162°C. It is colorless, odorless, non-toxic and non-corrosive, taking up approximately 1/600 of the volume of natural gas in gaseous state and weighing approximately 45% of equivalent volume of water. The burning of LNG is associated with low pollution, higher heating value, and higher ignition point compared to refined oil. It is also less easily ignited, and evaporates quickly in case of leakage. It is deemed as a clean, safe and efficient source of energy.



4. Delivering More Personalized Services



Serving customers and striving for excellence

For better customer satisfaction, we strive to expand the coverage of our service network, function and improve our services and quality to offer a better experience to our customers.

Expanding Our Service Network

We continued to expand our service network and improved our management of service stations to provide more diverse and convenient service to customers. In 2012, we opened 748 new service stations and grew our sales network by 5 million tons. We currently have 19,840 service stations. We opened more than 1,800 new uSmile convenience stores, with more than 13,100 service stations now featuring a convenience store to provide a one-stop service. Our services are now available in 32 provinces (municipalities and autonomous regions) nationwide.

Improving Service Quality

We launched the "Serving the People and Striving for Excellence" initiative in 2012, rolling out initiative guidelines and 22 related measures. We encouraged quality service, and raised awareness of oil quality, consumption and gas station measurement. We took the initiative to provide consumers with product information and technical advisory services. We started an end-to-end tracking service to track customer experiences, recommendations and satisfaction to build a caring and harmonious customer environment, and continued to improve service quality.

748

opened 748 new service stations

1,800

1,800+ new uSmile convenience stores in operation

Maintaining the Integrity of Our Services

We are committed to providing a safe user environment. In the "Quality Month" of 2012, PetroChina jointly signed the *Letter of Self-regulation on Quality, Safety and Integrity in Production and Sales of Car Fuels* with Sinopec and CNOOC. The Company pledged its commitment to fulfilling its responsibilities in product quality, safety and consumer health, upholding the integrity of diesel in automobile industry, and providing safe and clean oil products to the community through inspections and risk surveillance in tandem with the National Supervision and Inspection Program for Product Quality.



Introducing oil products for customers



Case Study Ningxia Petrochemical provides end-to-end customer service

Ningxia Petrochemical improved its service capabilities in pre-sale, sale and after-sale stages, with the goal of delivering a first-class customer experience. In the pre-sales period, the company builds a good understanding of customer needs and market demand through customer visits, and developing a tailored production plan to ensure timely and sufficient supply. The company's urea products have maintained a 100% compliance rate for a long time, and a first-grade rate exceeding 96%. During the sales process, the Company provides technical support through customer service hotlines and online information platforms, to teach farmers the proper use of urea products and attend to their queries. In the after-sale period, we conduct follow-up visits in Ningxia, Inner Mongolia, Qinghai and Gansu to solicit feedback and suggestions from agricultural companies, distributors and farmers. In a 2012 survey, Ningxia Petrochemical's products and services were rated by consumers to be "very satisfactory".

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 2012, we improved our forecasting capabilities, monitored the latest market developments and increased diesel/gasoline ratio in line with market demand. We are responsible for over 40% of the domestic market supply for oil products, and 70% of the same for natural gas, meeting the needs of urban residents, public utilities and key customers.

Stabilizing Supply in Peak Periods

During the peak periods in spring, summer and autumn, we improved the transport and distribution of diesel fuel, boosted fertilizer production and provided high-quality products and supporting services for agricultural production. In view of tight supplies in the flood season, we took effective measures to ensure the safety of oil and gas production, transportation and sales operations.

The company struck a reasonable balance in the use of domestic and foreign resources, accelerated the construction of new projects and ensured the coordinated operation of downstream projects. By improving network operations and fully utilizing the peak shaving capacity of underground gas storages, pipeline network storages and LNG terminals, we were able to maintain the supply of natural gas in peak periods such as during summer.

Ensuring Supplies for Disaster Relief oil Products

We established an effective contingency plan for responding to natural disasters like cold snaps, floods and droughts. In early 2012, a cold snap hit Inner Mongolia, Heilongjiang and Liaoning in northern China while southern provinces such as Yunnan suffered from droughts. We increased diesel fuel production, adjusted the diesel-gasoline ratio and production and increased the production of low-freezing-point diesel oil. Meanwhile, we increased resource allocation and transportation, opened specific filling stations and "green channels" to facilitate the transportation of diesel fuel. We also increased the supply of refined oil and low-freezing-point diesel oil by 15% on a year on year basis, which was timely in maintaining its stability. Following the Yunnan earthquake in September 2012, we promptly activated our emergency plan by appointing four working groups to coordinate rescue efforts, relief supplies, logistics and communications. We opened 14 service stations with a green channel which connected Kunming, Zhaotong and Yiliang to support earthquake relief efforts.



Strengthening oil transportation in peak times

Ensuring Natural Gas Supply in Winter

During the winter of 2012, some regions experienced a temporary tight supply of natural gas due to wide-spread low temperatures, resource supplies constraints and the switch to gas-fueled heating boilers to improve air quality in urban areas. Faced with this situation, the Company stabilized domestic natural gas market by significantly raising output from its domestic operations by 10 million cubic meters daily, boosting LNG supplies by increasing purchases, gasification volume at LNG terminals etc., stabilizing the supply of imported pipeline gas resources, increasing gas production from gas storage, and improving demand-side management with a 363 million cubic meter in gas supply during peak periods (up by 15%).





05

“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 the security in overseas operations. As such, we aim to achieve the optimization of both corporate values and employees' benefits.

1. Employees' Rights

We remain committed to a “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.

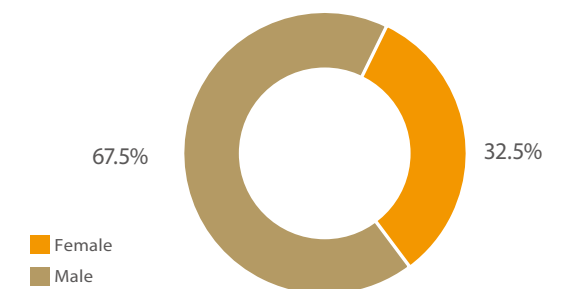
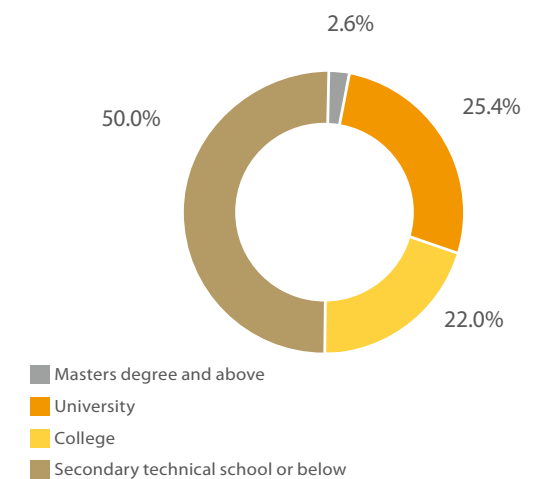
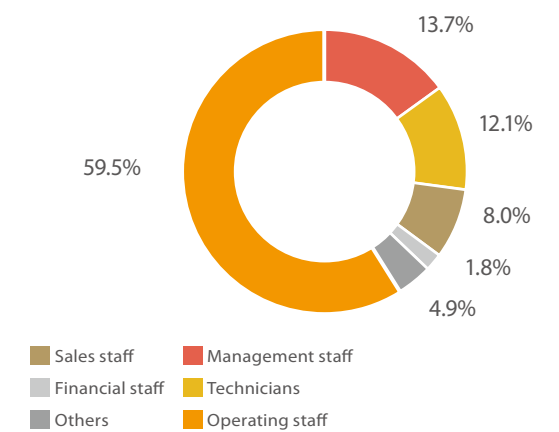
Fair Treatment

At PetroChina, we strictly abide by *Labour Act of the People's Republic of China* and *Labour Contract Act 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 contract, remuneration, insurance and benefits, performance review, rewards and disciplinary measures, training and leave benefits. We make every effort to look after our employees' interests and protect their legitimate rights, to build a mechanism to have the Company and employees 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 strictly 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 and ethnic minorities to increase job opportunities for local communities.

Remuneration and Motivation

We have 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 maintained 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 2012, the Company's compensation and benefits policy continued to favor employees taking front-line positions, working in harsh environments and assuming key responsibilities. Further, we put in place an incentive mechanism for key front-line positions and implemented a job rotation program in our overseas operations.



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 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 to continuously improve democracy in corporate governance.



Case Study Oil workers in the microblog era

At the Hounan Block of Changqing Oilfield's No.1 Production Plant, workers from different sites and stations do not see each other often due to busy work schedules. In early 2012, a microblog group was formed to encourage them to share their thoughts and ideas. Through this useful tool, veterans share work-related experiences and offer advice to junior staff, while the management get to find out the latest from the workers and discuss work-life balance issues, creating a cohesive atmosphere among group members. Workers contribute their suggestions and opinions on how to improve crew competence, operational safety and after-work activities in the group, which have improved the management of the sites and stations. In 2012, a total of 102 suggestions and proposals were tabled and 68 were implemented.

2. Occupational Health

The Company abides by the amended *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 have completely prevented workplace hazards and public health emergencies.

Awareness of Occupational Diseases Prevention

All PetroChina staff have been informed of the amended provisions of the *PRC Prevention and Control of Occupational Diseases Act* through various channels such as lectures and a series of "week-long publicity" campaigns. In 2012, we provided tailored training courses to managers and 420 occupational healthcare professionals. We continued to strengthen employees' awareness and knowledge on occupational diseases prevention and treatment. For example, over 400,000 PetroChina employees participated in the knowledge quiz held by the State Administration of Work Safety and All-China Federation of Trade Unions and 18 subsidiary companies were awarded. Further, our employees are trained to use and maintain protective equipment and appliances.



Caring for physical and mental health of employees



Energetic young employees

Investigation and Prevention of Occupational Diseases

We have proactively implementing the monitoring of occupational hazards at workplaces, and conducted special investigations on hazards induced by noise and dust. In addition, we have tailored such monitoring to the special characteristics of specific workplaces and positions, enhancing protective measure for our facilities and employees. The Company has leveraged its experience in occupational hazards prevention and control for high-sulfur oil and gas fields at Liaohe and Sichuan Oilfields, strengthening the monitoring and control of hydrogen sulfide related hazards, to ensure our employees' health and safety.

Medical Examination and Surveillance

Employee medical examination has always been an important part of our health surveillance programs. Priority is given to our front-line staff, contractors and temporary workers. We have carried out specific programs at our affiliated occupational

health centers to promote medical examination standards and emphasize service quality, health report analysis, feedback and health intervention. Employee health surveillance records are properly maintained. In 2012, over 95% of our employees underwent medical examination.

Occupational Health Assessment for Construction Projects

In compliance with applicable rules and regulations, we standardize the occupational health assessment and ensure that labor safety and health facilities in any construction project are designed, constructed and operated alongside the main project concurrently. We have conducted pre-appraisal of occupational hazards and designed protective facilities for a number of projects, including the Third West-East Gas Pipeline, to ensure that the occupational hazards can be identified and prevented at the very start.



Mental health class for employees

Healthcare Management and Services for Operation Crews

The Company places great importance on healthcare and disease prevention for its operation crews. We continue to provide healthcare services to front-line workers and implement a health management system to address hazards in relation to occupational poisoning, health damage, infectious diseases, food poisoning and psychological illness. We have launched a series of initiatives on health management, disease prevention, food/ water safety, and psychological health counseling. Seminars and academic exchanges on preventive medicine and health management are conducted and campaigns for health education, healthy lifestyle, fitness exercises, healthy diet and smoking cessation are introduced throughout the Company.



Case Study Health management at Lanzhou Petrochemical

Adhering to the philosophy of “putting health first”, Lanzhou Petrochemical strove to enhance employee health conditions by building health awareness, addressing behavioral issues and fostering healthy lifestyle.

Assessment of Health Risks. A pilot program of health intervention was introduced to build awareness, encourage behavioral changes and promote healthy living. Occupational health management as part of health management was focused on workplace health hazard monitoring, health care and workplace protection.

Health Infrastructure. IT-enabled health management platform and medical examination platform were launched. Working environment and conditions were improved to ensure a continuous improvement in addressing the workplace health hazards.

Health Culture and Knowledge. Employees were encouraged to join the “Health is in Your Hands” initiative – a move advocating care for life and health. A newsletter with health quizzes and an employee health column were used to explain health concepts and build health knowledge, as part of the efforts to guide positive behavioral changes and promote a positive attitude.



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 Development Mechanism

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. In 2012, we forged ahead with an initiative to build the talent pools for business management, technical expertise and operating skills. We improved the management structure in terms of age, expertise and experience, and provided more career opportunities for young employees. Over the course of competing for the professional and technical positions, a large number of talent with a long-standing commitment to technical work stood out. Meanwhile, we stepped up the building of national studios for skilled masters and experts. In particular, Shu Binxia Studio and Zuo Chengyu Studio have become operational at Liaohe Oilfield and Daqing Petrochemical respectively. Our people have achieved impressive results at skill competitions at home and abroad.

At the end of 2012, the Company had 14 academics at the Chinese Academy of Sciences and the Chinese Academy of Engineering, 1,058 experts entitled to the Government Special Allowance, as well as 224 senior technical experts, 91 management experts, and 231 skilled experts. We have further introduced high caliber people from other countries and 17 candidates have been evaluated under the “Thousand People” Plan, a national program aimed at attracting outstanding talent from abroad.

Employee Training System

In 2012, we continued to step up the construction of training bases, curriculum and teaching faculties. A training program

was developed for distance training administrators and the distance training platform was further improved to deliver three online training projects with extensive courseware. New training materials were compiled and reviewed, covering more than 140 training courses on management and technology. The PetroChina Trainer Program and the Double-100 Program (100 celebrated trainers and 100 classic training courses) were launched to improve the quality and effectiveness of training.

Skills training is available at multiple levels, through numerous channels and forms to enhance the overall competence of managers, technical professionals, operators and international talent. For managers, we provide training on accountability, strategic thinking, global perspective and HSE, with more than 100 managers and candidates for management positions undergoing training throughout the year. For front-line operators, the Company has published guidance on enhancing training for front-line workers, focusing on professional techniques and operating skills. More than 1,500 employees have received training on professional techniques and skills through over 20 training classes designed for senior technicians and technicians. For international talent, a dozen training classes have been conducted for more than 200 employees. Some managers have been given the opportunity to visit and train at internationally renowned universities. Technical experts were selected to participate in advanced management and technology workshops in Canada. Demonstration courses on Arabic, Spanish and other languages were offered to expatriates in our overseas projects to improve their professional competence as well as language proficiency. In 2012, the headquarters of the Company organized 142 training programs with approximately 20,000 participants. All senior technicians and employees working in key positions underwent training in the year.

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. As of the end of 2012, local employees accounted for 94% of our overseas workforce.

Respect for Cultural Differences

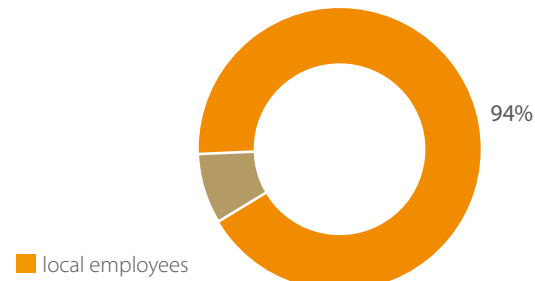
PetroChina fully respects cultural diversity and local customs. We promote understanding and respect for different values and traditions and foster cross-culture cooperation in a culturally diverse workplace. Chinese employees are encouraged to learn about the laws, history, culture and religious customs of local communities. On the other hand, foreign employees are invited to visit our headquarters in China and experience Chinese culture.



Local hiring at PetroChina's Algeria project

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.



Case Study Local hiring in Kazakhstan

With an open and inclusive attitude, PetroChina has upheld the principle of local hiring in its operations in Kazakhstan, focusing on employee training and cultural diversity. In 2012, locals accounted for more than 98% of our staff headcount in Kazakhstan.

We respect Kazakh employees' religious beliefs and customs, and provide special amenities in accordance with the local culture encompassing food, festivals and lifestyles. We celebrate traditional festivals of Kazakhstan and China in multiple forms such as ceremonies and parties, for employees with different cultural backgrounds to build mutual understanding. We also developed training, education and job rotation programs and worked with the universities and training institutions in Kazakhstan to provide training courses on technology, management, marketing, HSE, business practices and language skills etc.

5. Security in Overseas Operations

The safety of our employees has always been an overriding priority in our overseas operations. A security management system has been established for our international operations to introduce rules and regulations under a systematic management framework. We have published management manuals and procedures, developed 12 training courses on system building, and streamlined the security-related risk management process. On an organizational level, security management bodies have been set up for overseas subsidiaries and affiliates, including the HSE Committee for International Cooperation and the Counter-terrorism, 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. With employee safety being part of our performance review, the Company signs a Safety and Environment Agreement with each overseas affiliate to identify security-related roles and responsibilities in overseas projects. In addition, it develops 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 was developed for security managers, site managers and operating crews to improve emergency response capabilities.



Great attention was paid to security and health of overseas employees



Case Study Emergency medical services for Halfaya project

PetroChina's Halfaya Project is located in Iraq, lacking access to healthcare resources. With employee safety as an overriding priority, an emergency medical system is taking shape. In 2012, a round-the-clock medical emergency network with professional paramedics was established to cover the entire area of operations. In view of the poor medical conditions in the local communities, emergency medical resources including a fleet of ground and air ambulances have been made available to ensure efficient and high-quality medical evacuation services. In addition, Iraqi doctors and bilingual healthcare professionals have been recruited to provide on-site medical services. Periodic training and lectures on first-aid skills as well as healthcare knowledge are given to employees to enhance their first aid skills in emergencies.





06

GIVING BACK TO SOCIETY

As our wealth comes from society, it is also our duty to give back to the community. Holding socio-economic development as our ultimate goal, we attach great importance to the well-being of people and social advancement. We never waver in helping the poor, assisting students with financial difficulties, volunteering in community services, and participating in community building. Through our efforts, we strive to build a harmonious society.

1. Promoting Development of Local Economies

PetroChina's development is inseparable from the support of the Government, communities and the public. In turn, our sustainable and stable energy supply has also boosted China's socio-economic development. We are committed to the development and construction of oil and gas fields, refining chemicals and pipelines, as well as cultivating local suppliers and contractors, driving the development of relevant local industries and creating jobs opportunities.

In 2012, PetroChina has worked with Xinjiang Uygur Autonomous Region and Xinjiang Production and Construction Corps to create a new model for strategic cooperation among local enterprises, governments and corps in the oil and gas sector. The Company also developed the Karamay Hongshan Oilfield, to promote local economic and social development. The Karamay Aksu Fertilizer Plant, the largest natural gas deep processing project in the

south Xinjiang area operated by the Company, is now under construction. The Kashgar-Zepu and Hetian-Zepu sections of the South Xinjiang Natural Gas Projects, which aim to benefit local communities, have been completed temporarily. They form a ring network together with the existing South Xinjiang Gas Supply Pipelines, which delivers natural gas to Kashgar, Hetian and Kizilsu Kergez Prefecture, to fuel economic development and improve living conditions in southern Xinjiang. Meanwhile, we unveiled the "Development Plan for Petroleum and Petrochemical Business in the Sichuan and Chongqing Area" to facilitate socio-economic development in Sichuan, Chongqing and the rest of southwest China by strengthening oil and gas exploration and development, and by building up natural gas production bases and demonstration areas for commercialized natural gas usage.



Case Study Fueling socio-economic development in Guangxi

Beibu Gulf in Guangxi has shown strong growth momentum in recent years and has become an economic development hub in southwestern China. In 2007, construction of the 10Mt/a refining project at Guangxi Petrochemical was kicked off in Qinzhou. The project became operational in 2010, providing oil products for Guangxi and the rest of southwest China and generating over RMB 10 billion of tax revenue for Qinzhou government. This made Qinzhou the fourth city in Guangxi with more than RMB 10 billion of fiscal revenue, behind Nanning, Liuzhou and Guilin.

With the 10Mt/a refining project at Guangxi Petrochemical, PetroChina has set up, expanded or jointly built 16 enterprises in Guangxi, comprising refinery, oil products marketing, oil and gas pipelines, city gas, oil reserves, international trade, the manufacture and maintenance of oil equipment, oil exploration and development, logistics and distribution, etc. These businesses cover almost the entire operations of PetroChina and in essence form an entire industrial chain. The Company has invested over 25 billion RMB in Guangxi since 2005.

In 2012, the Company paid over 17 billion RMB in taxes to the Guangxi government and provided more than 18,000 full-time jobs, making a positive contribution to the economic and social development in Guangxi.



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 and providing more job opportunities.

Targeted and Pairing Assistance Programs for Poverty Alleviation

We have been actively participating in poverty alleviation efforts in 14 poverty stricken counties and villages in 8 provinces, namely Xinjiang, Henan, Tibet, Qinghai, Chongqing, Guizhou and Jiangxi and Fujian. In 2012, we scored a number of major achievements through our targeted programs and pairing assistance programs for poverty alleviation. In Taiqian County, Henan Province, Hengrun Petrochemical's expansion project for the production of C4 BTX aromatics is now operational with our assistance. We have supported Kai County in Chongqing for over a decade, implementing seven assistance initiatives in culture, education, healthcare and tourism. In addition, we helped to build infrastructure for the local communities to improve their living conditions, and boosted the growth of the public sector. PetroChina Southwest Oil & Gas Field Company has been recognized by the Three Gorges Project Construction Committee of State Council as an "Excellent Unit in Assisting in Resettlement from the Three Gorges Reservoir Area". We donated RMB 41.24 million yuan in poverty alleviation initiatives during the year.

Disaster Relief

It is a traditional Chinese virtue and also an esteemed tradition of PetroChina to "help people in need". In view of the ongoing drought in Yunnan Province, we set up a dedicated donation fund to alleviate drought and drinking water shortages. After the earthquake in Weining, Guizhou Province, the Company immediately activated its contingency plan to help the quake victims overcome the difficulties in the wake of the disaster.



Health care service for local Tibetans

Voice from Recipient Governments

PetroChina provided its expertise in the C4 aromatization technique on an ex-gratia basis to support the business growth of Hengrun Petrochemical and to build Taiqian Chemical Industry Park into one of the key industrial parks in Henan Province. This laid a solid foundation for boosting economic growth and improving people's livelihoods. With PetroChina's support, Taiqian County's socio-economic development is on the fast track, heralding a growing industrial sector, breakthrough achievements in key projects, and an expanding industry cluster...

—People's Government of Taiqian County, Henan Province

PetroChina has provided Hengfeng County with immense financial resources and economic opportunities. Over the course of working with the Company, we have been impressed by the concern it has shown to our people's wellbeing, and its commitment to poverty alleviation as a good corporate citizen.

—People's Government of Hengfeng County, Jiangxi Province

Since 2007, PetroChina has provided comprehensive assistance to Fanxian County in areas such as projects, industrial sectors, financial resources, technical support and information, to boost the local socio-economic development.

—People's Government of Fan County, Henan Province



Feature Story Ten-Year Targeted Programs and Pairing Assistance Programs for Poverty Alleviation

Poverty alleviation is key to social cohesion, prosperity and harmony. Since engaging in our targeted poverty alleviation and pairing assistance programs, PetroChina has addressed the greatest and most pressing concerns of the poor by leveraging our strengths in the industry, technology and people. This has jointly promoted the development of the local community alongside our business, helping the poor rise up the wealth ladder.

An Expanding Scope of Aid. In the last decade, the scope of our poverty alleviation and pairing assistance programs has widened from six counties in Xinjiang, i.e. Nilka, Barkol, etc., to 14 counties (townships) in eight provinces (municipalities and autonomous regions). In 2011, the Company proactively participated in poverty alleviation programs in Xishui County, Guizhou Province. In 2012, we assisted the local government in building 13.5km of rural roads, which benefitted around 10,000 residents in 11 neighboring villages. We also donated more than 20,000 books, 140 computers and other teaching equipment to 30 local primary schools.

A New Paradigm for Poverty Alleviation. PetroChina has adopted a new paradigm for poverty alleviation, moving from donations in cash and kind to helping the poor through development and cooperation. We have developed an industry-driven approach to boost socio-economic growth in the recipient communities by providing financial and technological resources to local governments. In 2011, the Company made a free C4

technology transfer to Taiqian County in Henan Province. The Company also assisted Hengrun Petrochemical, a leading local company, in expanding its C4 BTX aromatics project. In 2012, the project has been entirely operated by Hengrun Petrochemical and is expected to generate more than RMB 100 million in taxes to the local government and to create 400 jobs for rural workers.

A Wider Range of Aid Measures. The Company continues to expand poverty alleviation programs focusing equally on intellectual and financial aspects with an emphasis on promoting self-help among locals. Over the last decade, we have built training centers for farmers and herders in the recipient areas, offering a series of skills training courses such as masonry, welding, cooking, driving and vehicle repair, etc. We have arranged study tours and further educational opportunities for local agricultural technicians, teachers and healthcare professionals, which have helped to lift them out of poverty by creating jobs and enhancing their competency. In addition, as part of its poverty alleviation measures, the Company also donates educational equipment to rural primary and secondary schools to improve the intellectual capacity of the community.

Over the past decade, PetroChina has promoted socio-economic development in poverty-stricken areas by leveraging its strengths and resources. Through these measures and using innovative means, we have improved people's livelihoods and promoted self-development in the communities.



3. Support for Education



Serving for training and selection of key automotive talent

Supporting educational initiatives is an important part of our contribution to social development. By establishing various scholarships and fellowships, donating funds to build primary schools, subsidizing teachers and students in impoverished regions and building schools for local communities in our overseas operations sites, we are proud to be active in contributing to the most meaningful cause of education.

Since the establishment of our scholarship fund in 2001, the Company has provided scholarships for seven petroleum and petrochemical institutions and fifteen “211” universities. These scholarships honor students and teachers for their outstanding academic achievements, motivation and for contributions to attracting talent. So far, these scholarships have been awarded to more than 7,000 students and 500 teachers, among which over 2,300 students have finished their studies through scholarship funding. PetroChina also co-sponsors FSAE-China with China Society of Automotive Engineers and other universities by offering a grand prize for the winner as an incentive and by providing a public platform for training and the selection of key automotive talent which enhances the overall quality of automotive engineering majors. In 2012, we donated to the Hope Primary School in Xixia District of Yinchuan City, Ningxia Hui Autonomous Region to improve its educational conditions. We also launched the “Hope Library” initiative, donating 1,000 bookshelves and 200,000 books to the schools in the deprived agricultural and grazing areas of Qinghai Province. In 2012, our donation for education totaled RMB 91.51 million yuan.



Case Study Building Schools for Children of Migrants

In 2011, PetroChina provided funding for the building of two schools in the Ecological Resettlement areas in Ningxia Hui Autonomous Region. Construction began in July 2011 and Kuankoujing School in Zhongning County was completed and opened in September 2012. Covering 11,000 m² and taking in 1,600 students with a campus comprising a teaching building, canteen and standard gymnasium, the school has all of the features required to help offer excellent education to children in the region. “This is the largest school here,” said a resettled resident. “Kids from nearby villages now have a place to study.”



4. Volunteer Activities

As a responsible member of the community, each and every one of us has an obligation to contribute to promoting social harmony and civilization. At PetroChina, we encourage and support our employees to volunteer in their communities. As of 2012, the Company had 7,500 youth volunteer teams with over 100 thousand members, and the teams have been actively engaged in volunteer activities in the spirit of “dedication, friendship, mutual-aid and development”.

The Guo Mingyi Volunteer Team from PetroChina Jilin Marketing Company volunteered to promote urban traffic safety, raise awareness of traffic rules and provide relevant consultation services. At No. 4 Production Plant of Daqing Oilfield, a Young Volunteers Association was established comprising four professional branches including “Helping the Seniors and Impoverished”, “Energy Conservation and Environmental Protection”, “Educational Support” and “Social Services”. The volunteer team of Jinxi Petrochemical, also known as “Jewelry Flower”, carried out voluntary work in a systematic and regular manner. In addition, on “Learning from Lei Feng Day”, a variety of voluntary activities was carried out to help the handicapped, assist seniors and to keep communities clean.



Volunteers telling stories for children with local teachers



Case Study “We Share the Blue Sky”

For eight consecutive years since 2005, there has been a tremendous amount of community service in the community where the Harbin Branch of PetroChina’s Northeast Marketing Company is based. Employees of the branch have launched a volunteer initiative — “We Share the Blue Sky” — to help kids from neighboring poor families and single-parent families in a number of ways.

With the support of our young volunteers, a 50-member children’s ensemble was formed to perform songs to kids and to participate in local art performances. Aimed at “creating a better world hand-in-hand”, the volunteers teach kids to make jiaozi (Chinese dumplings) for the more severely deprived families, bringing them happiness through hard work and dedication. A special fund was also created at a children’s charity store, and employees were encouraged to make donations. Through a variety of cultural, sporting and social activities, the

deprived children were able to experience how it feels to have a joyful and normal childhood. Highly praised for their work, the volunteer team from the Harbin Branch was named by the local government an Excellent Unit of the “Caring for the Next Generation Program” a number of times.



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 these different countries and try to promote positive socio-economic development in each local community.

Local Procurement

Local procurement can boost the development of local SMEs and create jobs for local communities indirectly. Therefore, PetroChina places strong emphasis on the procurement of local products and services. In Indonesia, we rely as much as possible on local resources, conduct technical cooperation with local enterprises and work with local SMEs for logistical support.

Environmental Protection

We have always had a strong focus on environmental protection while developing our projects. We protect the local ecological environments and try to minimize the impact of our operations on the environment by optimizing our technical processes and by applying energy-saving and emissions reduction technologies.

In South America, we act in strict compliance with the applicable laws and international standards on environmental protection. We have also implemented a complete range of practical measures to effectively protect the tropical rainforest ecosystem.

Community Construction

We are actively involved in infrastructure construction, poverty alleviation, disaster relief and professional training to help improve the living standards of local people and have realized that this is a common goal we share with the local communities.

In Niger, two PetroChina-funded classrooms have already been put into use in Bakin Birgi, and so far, we have donated 14 school buildings in Agadez, Diffa and Zinder.

In Oman, while working with local partners to boost oil and gas production, we were named “the Best Petroleum Enterprise in Oman 2011-2012” by the local government for our contributions to educational and community development.



Environmental protection at PetroChina's Ecuador project



Feature Story PetroChina in Indonesia

Since PetroChina launched its oil and gas operations in Indonesia in 2002, we have maintained an annual growth rate of 15.7% in oil and gas exploration and development projects. During this time, PetroChina has boosted local economic development, fostered local talent, participated in public welfare undertakings and promoted common development for enterprises and local communities. As a result of this, in 2012, we won the “Ten Year’s Excellent Operation Prize” which was given by BPMIGAS, Indonesia’s upstream oil and gas regulatory body.

Safety and Clean Production. Indonesia has large areas of tropical rainforest. Over the past decade, the Company has been adhering to international standards on health, safety and environmental protection in order to protect the environment. In addition to this, we have been leveraging new techniques for energy conservation and emissions reduction to help achieve clean production. These initiatives and our well-established HSE management system have allowed us to help protect the rainforest ecosystem. As of the end of 2012, the Company has recorded 2,807 days of zero accidents and 3,891 days of zero pollution/injuries, with an impressive safety performance highly praised by the Indonesian government.

Local Training. The Company actively pursues the localization of its workforce and tailors its human resources management system to this end. As of 2012, locally-hired employees account for 99.2% of our workforce in Indonesia. We place great importance on employee training, offering a one-week training program for

local employees every year to cover multiple disciplines such as petroleum technology and risk management in accordance with the job requirements and personal needs. Since 2004, the Company has also conducted a training program that allows Indonesian employees to study at the China University of Petroleum. In 2012, 422 employees have received training under this program.

Local Economic Growth. The Company vigorously promotes the development of local SMEs and creates a large number of job opportunities through local procurement and technical cooperation. Over the past decade, we have provided more than 3,000 direct jobs and nearly 5,000 indirect jobs for the communities in which we operate and paid over US 7 billion in taxes to the Indonesian government.

Public Welfare. We build roads at our project sites to help bring convenience to local residents. We also develop and implement healthcare programs to provide medical devices and offer free medical examinations and treatment for seniors. Our educational and cultural initiatives provide funding for underprivileged children to receive education, and our upgrading of schools and libraries help to improve educational facilities in the community. When Indonesia was hit by natural disasters such as tsunamis, earthquakes and volcanic eruptions, the Company was active in disaster relief efforts by donating in cash and kind.



Investor FAQs

Does PetroChina have an ethics committee?

The Company has put in place various policies governing ethical issues, including the *Code of Ethics for Senior Managers* and *Code of Ethics for Employees*. In addition, the Supervisory Committee is responsible for monitoring the behavior of directors and senior managers. PetroChina has also actively promoted the establishment of a proper health, safety and environment (HSE) management system to strengthen integrated HSE management. In 2009, as per the overall deployment of the *Plan for Establishment of the HSE Management System*, we issued the nine principles of HSE management to reinforce the awareness of managers' responsibilities and to clarify the division of horizontal and vertical responsibilities. Moreover, as a member of the UN Global Compact, the Company has made significant progress in aligning with the 10 principles of the Global Compact and submits annual reports to illustrate these advances.

Are all group policies reviewed on a regular basis?

We manage the Company in accordance with all legal requirements, which we consider to be our basic operational standard. We strive to ensure that the corporate structure is well coordinated and balanced and that the Company's values are fully to the fore. We have established a standard corporate governance structure and follow various laws, including the *Company Law of the People's Republic of China*, rules and regulations where the Company is listed. The Company's shareholder meetings, Board of Directors and related professional committees, and Board of Supervisors and executive bodies all operate independently, in accordance with the regulations of the Company.

The formulation and adjustment of the Company's major development strategies must be discussed and approved by the Company's management and Board of Directors. We ensure the stability of our development strategies and policies, and constantly review and adjust these strategies and policies according to changes in the business environment so as to optimize the Company's development.

Is any part of annual executive remuneration linked to environmental, social or governance targets?

Annual executive remuneration for the Company's senior managers mainly comprises base salaries and bonuses, which are based on the results of their annual performance evaluation.

Key performance evaluation indicators are divided into three categories: effectiveness, operations and control. Effectiveness indicators mainly include returns on invested capital (ROIC), net profit and free cash flow. Operations indicators consist of cost indicators (the cost of oil and gas operations, the unit cost of processing, the unit cost of marketing, etc.), investment budget control indicators (the difference between the budget and actual capital expenditures), and long-term development of the Company (the oil reserve replacement ratio, etc.). Control indicators mainly refer to the Company's safety, quality and environmental protection standards. The annual working target of the Company is taken into consideration when selecting the specific key performance indicators to evaluate senior managers. Indicators that are not included in the system described above may be supplemented according to our operational needs.

Do you have any measures on anti-corruption?

We have been striving to strengthen our ethical standards and have established codes of conduct for both senior managers and employees according to which all employees must not make use of the Company's property for personal interests. We have also formulated strict guidelines regarding souvenir exchanges in our business. Apart from the codes of conduct, we have also put regulations in place regarding ethical occupation standards for both senior managers and employees. What's more, our senior managers have to confirm in writing on a yearly basis that ethical occupation standards have been met.

How are project hazard risks assessed and managed?

We hire professional technical service institutes to assess occupational health, production safety and environmental protection at the project proposal stage, conduct special reviews at the project design stage for the HSE capability of the design, carry out acceptance checks after the project goes into operation, and launch safety assessments regularly for amendments to counter hidden dangers.

While we recognise that PetroChina does not directly commission animal testing, does the Company use the results of testing by third parties?

Our businesses do not perform animal testing. We operate in strict accordance with relevant national and industry standards.

PetroChina is dedicated to operating in a safer, more efficient and more environment-friendly manner so as to achieve a good balance between the economy, environment and society.

Does the Company conduct regular risk assessments to identify potential failures in both its infrastructure and operations?

Yes. Our affiliates hire third-party technical institutes to carry out safety evaluation programs on a regular basis to identify potential problems in infrastructure and during operations. Furthermore, we have implemented the HAZOP analysis method recently. Our HSE committees at all levels also meet regularly to discuss safety and environmental issues.

Are there any policies and institutions within the Company to properly maintain infrastructure (pipelines, oil tankers, etc.)?

The Company has management institutions in place regarding equipment and safety management for details pertaining to infrastructure checks and maintenance.

How do you assess safety accidents?

According to the *Regulations on Reporting, Investigation and Disposition of Work Safety Accidents* (Decree No. 493 of the State Council of the People's Republic of China), production-related accidents can be classified with the grades below in line with personal injury and direct economic loss. (1) Very Tremendous Accident, which refers to accidents that cause more than 30 deaths or grievous bodily harm to more than 100 people (including acute industrial toxicity) or direct economic losses of more than RMB 100 million. (2) Tremendous Accident, which refers to accidents that cause 10 to 30 deaths or grievous bodily harm to 50 to 100 people (including acute industrial toxicity) or direct economic losses of more than RMB 50-100 million. (3) Severe Accident, refers to the accidents that cause 3 to 10 deaths or grievous bodily harm to 10 to 50 people (including acute industrial toxicity) or direct economic losses of more than RMB 10-50 million.

How does PetroChina ensure operational safety?

PetroChina addresses production safety and believes that people and the natural environment are the world's most

important resources. The ideas of caring for life and protecting the environment are part of our motto. We stick to the principles weighted towards a people-oriented, prevention-driven approach, advocate total participation and continuous improvement to achieve zero injuries, pollution and accidents, and have established a resource-saving, environment-friendly and safe production enterprise. PetroChina strictly adheres to national production safety laws and regulations, implements a responsibility system for production safety and environmental protection, and advocates safety production principles throughout the Company. We have also proactively promoted the establishment of our HSE management system, established a monitoring-based management system for safe production, adopted the latest skills and technologies for safe production, and improved working conditions to ensure employee safety.

PetroChina's headquarters, together with its affiliates, has established and implemented the Company's HSE system. We have formulated a series of quantifiable HSE indicators that all staff, contractors and suppliers are responsible for meeting together. This ensures that the Company's safety and environmental protection steps are implemented by all units, crew and staff, as well as other related parties.

PetroChina considers HSE work to be its top priority. The Board of Directors has established the HSE Committee to include safety and environmental protection as part of the performance evaluation indicators for its management. Moreover, safety and environmental protection responsibilities are well assigned internally, with the head of every unit taking full responsibility for safety and environmental protection.

What are the updates of your safe production and HSE management systems?

We have always placed great emphasis on our HSE initiatives and are therefore constantly enhancing and improving our HSE management systems. In 2012, we continued to promote the building of our HSE systems, enhanced our safety and environmental management initiatives, strengthened our source control and process monitoring and raised our safety and environmental protection standards. Safety and environmental protection is an area on which we are constantly focused and will continue to refine.

PetroChina advocates the principles of “people-oriented safety management”, and we believe 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. Specific measures include supervision enhancement, carrying out regular safety checks and risk prevention activities and establishing a sound and effective emergency rescue system to respond to accidents.

In our overseas operations, we launched the Upgrade Plan of HSE Management System, developed HSE information system upgrade plans to organize HSE training for management personnel, strengthened our HSE consultant training program, enhanced the HSE training programs for our front-line employees and promoted our HSE training matrix.

Can you provide updates regarding any recent health and safety issues?

We adhere to the *Emergency Response Law of the People's Republic of China* by promoting the establishment of emergency management systems and regularly organizing emergency safety drills. In 2012, the Company decided to launch its first comprehensive audit of its HSE management system. The audit conducted in the first half of the year was highly detailed as it was the largest in scale, featured the most participants, took the longest time and offered the most extensive analysis available in recent years.

Apart from being concerned about the safety of its staff, PetroChina is also very concerned over the wellbeing of its contractors. Due to this concern, the Company has decided to incorporate the management of its contractors' HSE standards into the Company's HSE systems. To ensure safety in their construction work, we have launched special campaigns highlighting safety management for our contractors, reinforced our safety training initiatives and closely monitored adherence to these regulations to prevent any violations.

To ensure safety for all, PetroChina continues to take precautions by carrying out a series of activities which include regular safety checks, eliminating safety hazards, improving safety drills. We are fully aware that in order to reduce the number of accidents and to ensure the safety and stability of our operations, we must strengthen our security risk management vigorously. Therefore, PetroChina has deployed technology and management experts to conduct in-depth post-accident analysis

at the technical and management levels. Additionally, we will hold relevant units and personnel responsible for accidents in accordance to the applicable laws. Ultimately, this has the aim of identifying and troubleshooting safety hazards and further strengthening construction safety for new areas, new businesses and rapidly developing businesses.

Does the Company have any measures in place for the HSE management of its contractors? Do these include any significant changes?

As mentioned, we attach great importance to the safety of our contractors and have incorporated their HSE management into our own systems. In 2012, PetroChina continued to improve HSE qualification and performance evaluation criteria for its contractors' and also established a withdrawal system for contractor in which we no longer work with contractors that fall short of our HSE standards. Our affiliated companies have also formulated contractor safety management systems to ensure that they meet healthy and safe operational standards. Apart from that, we signed the Safety and Environment Accountability Pledge with our overseas business units, which ensure that relevant responsibilities in terms of securities will be implemented at each of our overseas projects.

What is the selection criteria for PetroChina when choosing a contractor? To what extent and in what ways are contractors' HSE and risk management capabilities assessed before they are engaged by PetroChina?

We have formulated the Construction Contractor Management Approach (“the Approach”) to manage the process of admittance for our contractors. According to the Approach, contractors are divided into three categories and reviewed individually. Their details are kept on record by our headquarters, professional companies and corporate organizations, respectively.

Contractors for specific projects are selected through tender. Assessments of contractors' HSE and management capabilities are then carried out in three phases prior to their engagement. Firstly, HSE and risk management capabilities are included as part of the basic requirements for contractors at the admittance stage, and unqualified contractors are not be accepted. Secondly, contractors' HSE and risk management capabilities are reviewed as a key requirement during the tender process. Thirdly, if contractors' HSE performance deteriorates, they will be re-evaluated or even disqualified.

How does PetroChina review the quality of contractor work during implementation? Are there regular audits?

We generally hire third-party companies to conduct on-site supervision during the project period. We also conduct both regular and unscheduled check-ups on work-in-progress. These include evaluations to identify and rectify problems if any are found.

As part of the project planning process, does the Group conduct any environmental or social impact assessments?

The Company regularly addresses any potential impact that its business operations might have on both the environment and society. Therefore, before moving forward to any project design stage, we conduct detailed evaluations on the potential impacts that the project might have on the environment and society.

We hire professional technical service institutions to carry out assessments on occupational health, production safety, and environmental protection at the project proposal stage, conduct special reviews at the project design stage to evaluate the HSE capabilities of the design, conduct acceptance checks after the project goes into operation, and carry out regular safety assessments to make any necessary amendments in order to avoid potential dangers.

What are the Company's views on energy savings and emissions reduction?

We adhere to the concept of “Prioritizing environmental protection and putting safe production first”. Therefore, we are strong advocates of promoting the development and utilization of technologies related to energy savings and emissions reduction. Additionally, we believe in the promotion of technologies related to the optimization of energy systems. This commitment can be clearly seen in our 10 Energy Savings Projects and 10 Emissions Reduction Projects.

We built and promoted market-oriented energy-savings mechanisms mainly in the form of contracting and implementing energy management projects. Through these initiatives, we were able to achieve satisfactory economic and social benefits. In addition, the Company launched a promotion week featuring energy savings with the aim of enhancing awareness of energy savings and emissions reduction among our employees.

What quantitative environmental targets has the Company set going forward? Does it have plans to publish these?

PetroChina places great emphasis on energy savings and emissions reduction, which is a key part of our corporate social responsibility program as well as one of our main focuses for future development. The sustainability report discloses information annually and includes indicators such as the amount of oil discharged in waste water, energy and water saved, COD discharge in waste water and the SO₂ discharged in the air.

How does PetroChina reduce its greenhouse gas emissions? In what ways do you disclose information pertaining to carbon dioxide and other environmental matters?

Cutting greenhouse gas emissions and protecting the environment are serious challenges confronting society worldwide. Since 2008, PetroChina has conducted intensive research, and in 2010, unveiled its “Green, International and Sustainable” ideas for development. These ideas call for reducing CO₂ emissions and including data on them in the internal statistics system. However, since there is no standardized method of calculating CO₂ emissions for the oil and gas industry either in China or globally, the report did not feature this data to avoid large discrepancies and misunderstanding.

The Company has always made it a priority to improve the processes in place for the disclosure of information pertaining to the following six areas: greenhouse gas emissions, impacts on health and safety, and the local environment, business operations and transparency, labor practices and ecosystem services. This is why the report features environment-related content and figures arranged section-by-section. PetroChina believes that by applying effective management strategies to mitigate the impact to the environment, communities and corporate governance, we will be able to create long-term value for our shareholders and for society.

Is the Group's EMS ISO 14001 certified? Are the entire group's operations covered by this certification?

The Company's subsidiaries have implemented ISO 14000 standards according to the scope of their businesses and actual needs. These subsidiaries have also applied for ISO 14001 certification according to their actual needs. All subsidiaries of the Company have established and implemented HSE management systems which includes key elements of ISO 14000 standards.

What is the Company's policy on the use of hazardous substances?

The Company carries out HSE risk assessments on a regular basis according to our HSE management systems. This includes assessments on the use of hazardous substances and ensuring that the use of these hazardous substances is terminated according to relevant laws and industrial policies. For example, we no longer use insulation materials with fluorine content in our pipelines.

What steps will the Company take in waste recycling?

The Company has formulated and published *Guidelines for Wastewater Management* and *Guidelines for Solid Waste Management*. According to the environmental requirements for the production and operation processes, the Company has carried out clean production assessments based on the HSE management system. The Company has conducted waste recycling through several steps, including recycling, advanced treatment, effective treatment and waste resource utilization so as to convert waste into resources.

We have oil spill prevention programs in relation to marine oil operations and the transport of oil by sea. We have also established a Marine Emergency Rescue Center that is equipped with vessels and oil waste recycling facilities. Our Special Contingency Plan for Offshore Oil Exploration Emergencies and Special Contingency Plan for Environmental Emergencies also include oil spill prevention programs.

What percentage of employees are represented by trade unions?

Attaching great importance to democratic management, participation and supervision, the Company has established trade unions, as well as the Democratic Management System and Factory Affairs Publicizing System, through staff representative associations. Currently, almost all staff are members of trade unions. In addition, the Company has further enhanced the authority of staff representative associations, regulated and improved staff representative association system and proposed new ways and methods for publicizing the democratic management of factory affairs so as to enhance the level of democratic management in the Company. The Company and all its affiliated enterprises have established multiple channels to communicate with employees at all levels and adheres to

democratic procedures through the holding of staff gatherings, democratic discussion and meetings with staff representatives. In this way, employees' opinions are solicited and employees are also encouraged to participate in the enterprise's operations and management. In addition, the labour relations coordination mechanism has been further improved to achieve even more harmonious labour relations.

How has the Group improved its human rights?

PetroChina consistently adheres to a "people-oriented" philosophy. We respect and maintain the legitimate rights of our employees and strictly adhere to the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China* and the *Trade Union Law of the People's Republic of China*, as well as other relevant laws and regulations in countries in which the Company operates. Furthermore, we have established a sound employment management system.

We rigorously comply with all local laws and regulations and adhere to an equal and nondiscriminatory employment policy in every country and region. We provide equal opportunities and fair treatment to all employees regardless of their nationality, ethnicity, race, gender, religion and culture. We strictly prohibit the employment and use of child labor and resist all forms of forced labor. Male and female employees enjoy equal rights in the company. Additionally, the Company has always aimed to promote the employment of local residents, females and ethnic minorities in an effort to increase job opportunities for local communities. We established the Tentative Foreign Labor Management Guidelines in 2010 in order to enhance the management of foreign labor and to better regulate employment practices. Currently, international employees make up 94% of all of the Company's overseas employees.

The Company respects the rights of employees to know, to participate, to express and to supervise. The Company has established and improved all levels of workers' congress systems and trade unions, as well as the democratic management and company disclosure systems. Moreover, trade unions represent front line staff and employees at all levels, communicating and negotiating with the Company in any and all matters of vital interest to employees.

We have also established numerous and varied platforms for communication in order to strengthen the Company's relationship with its employees. Policies such as "Open Day", "Contact Point", employee-sharing sessions, email access and hotlines are used to

gather employees' opinions as well as to assist us in making more informed and practical decisions.

What HSE management measures are there with regard to the overseas business and how have they improved HSE management so far?

We have founded an HSE Committee for International Cooperation. Also, Office for Overseas Anti-terrorism, Security and HSE has established social security working teams in 10 countries where security situations were rather tense. We introduced a controlling system for social security risks, allocated emergency response resources, and improved related plans, so as to manage and evaluate such risks. In addition, we have formed partnerships and joint emergency response mechanisms with the local governments, Chinese embassies and consulates, and security institutions in overseas countries to conduct anti-terrorism, security and emergency response training, as well as training to improve the management and skills of overseas project security teams.

No general industry safety accidents have been reported in our overseas business operations, bettering the international

average level of the industry. The Company has also avoided environmental pollution and ecological damage in its overseas business. Meanwhile, the occupational disease rate of our overseas employees is zero.

How does the Company reduce overseas business risks and sustain the safety of its overseas assets?

The Company is very careful with regard to its overseas investment opportunities and has taken positive measures to reduce various types of risks in its foreign operations. Firstly, the Company conducts various aspects of risk evaluation, including political, legal, economic and technological aspects, when evaluating potential investments in projects overseas. It does not enter countries and regions that have potential or ongoing political conflicts, or are at high risk of UN sanctions. Meanwhile, in terms of the investment structure of its projects overseas, the Company is very careful in choosing investment partners in order to reduce political risks. For example, the Company tries to enhance cooperation with large international oil companies and resource countries to reduce such risks. The Company's overseas business is safe at present.



Objectives and Plans

Looking ahead to 2013, guided by its scientific approach to development, PetroChina will continue to implement its strategies as they pertain to resources, the market and internationalization and fulfill its economic, environmental and social responsibilities. The Company will focus on accelerating independent innovation, consolidating the basis for business management and promoting the shift in the model of growth to further enhance its capabilities to grow in an all-round, harmonious and sustainable way.

Aspects	2013 Objectives	2013 Action Plans
Oil & Gas Production and Supply	To accelerate oil and gas operations in China and strengthen capacities, to expand the scope of overseas oil and gas cooperation and enhance internationalization	<ol style="list-style-type: none">1. Continue to firmly adhere to the resources strategy and strengthen our leading position in China's upstream operations.2. Carry out steady and balanced refining and petrochemical production while remaining market-oriented and cost-efficient.3. Adapt to market changes and actively promote the healthy growth of oil product sales.4. Accelerate natural gas market development and ensure safe, steady and orderly supply.5. Strengthen the portfolio of reserves for the development of oil and gas cooperation through independent exploration activities, M&As and new projects.
Safety and Environmental Protection	To improve the HSE system and further promote its implementation so as to improve safety both intrinsically and effectively	<ol style="list-style-type: none">1. Continue to improve the centralized HSE management system while streamlining its assessment procedures, identifying and addressing hazards in a timely manner and ensuring the further improvement and more efficient implementation of the system.2. Step up HSE activities such as hidden hazard identification, evaluation, countermeasures approval, supervision and project completion review; monitor the control process of major hazards and build a long-term mechanism for hazard control to eliminate the possibility of future hazards.3. Emphasize enforcement with a focus on accountability and anti "3 violations", strictly implement disciplinary administrative sanctions for preventable accidents, strengthen management of operational safety contracts and staff performance reviews, identify each staff member's safety and environmental responsibilities to ensure all procedures are well aligned.4. Push ahead with ecological civilization, with a greater focus on energy conservation and emissions reduction, and enhance accountability, supervision and evaluation.

Aspects	2013 Objectives	2013 Action Plans
Employee Development	To further enhance a competent workforce and solid frontline structure and to improve overall team capabilities	<ol style="list-style-type: none">1. Enhance workforce competence to support long-term corporate development; push forward team building with business management, professional techniques and skilled experts, especially to build a team of high-quality international talent.2. Strengthen skills training, targeting key positions and overseas employees.3. Reinforce the fostering of frontline teams with a focus on skill training, performance, management, innovation and coordination.4. Carry on identifying and monitoring occupational hazards, strengthen occupational surveillance, and improve the operating environment and occupational health management.
Public Welfare	To actively undertake social responsibilities that support public welfare and the development of a harmonious society	<ol style="list-style-type: none">1. Actively support and participate in public welfare activities, strengthen and improve the management of charitable donations, and maximize the social recognition of philanthropic initiatives.2. Strengthen communication with local governments and integrate the Company's development with local economic development plans.3. Continue to push ahead with poverty alleviation efforts, including disaster relief, and donations towards education and youth volunteering initiatives with a focus on technology and education-driven poverty alleviation.4. Establish a long-term poverty alleviation mechanism, ensure financial input, improve alleviation methodology, actively carry out alleviation initiatives and solve the difficulties of those in need in a timely manner.
Anticorruption	To enhance anticorruption efforts and ensure the integrity of the management, and thus guarantee the continued growth of an international energy company	<ol style="list-style-type: none">1. Enhance education and promote the fight against corruption.2. Strengthen integrity and risk control systems, and implement a more effective system for combating and preventing corruption.3. Set up role models among the management team to showcase integrity and self-discipline.4. Continue to strengthen investigatory efforts and resolutely punish violations and irregularities.5. Ensure the promotion of integrity, and enhance the link between investigation results and accountability.

Performance Statistics

Category	Indicator	2008	2009	2010	2011	2012
Economic	Total assets (RMB 10 ⁸)	11,962	14,503	16,565	19,176	21,689
	Turnover (RMB 10 ⁸)	10,726	10,193	14,654	20,038	21,953
	Net Profit (RMB 10 ⁸)	1,145	1,034	1,400	1,330	1,153
	Taxes (RMB 10 ⁸)	2,227	2,045	2,870	3,744	3,620
	Proven crude reserves (10 ⁶ barrels)	11,221	11,263	11,278	11,128	11,018
	Proven gas reserves (10 ⁸ ft ³)	611,890	632,440	655,030	666,530	675,810
	Oil equivalent production (10 ⁶ barrels)	1,182	1,196	1,228	1,286	1,343.1
	Crude oil production (10 ⁶ barrels)	871	844	858	886	916.5
	Marketable natural gas production (10 ⁸ ft ³)	18,642	21,122	22,212	23,964	25,588
	Total length of crude oil pipelines (km)	11,028	13,164	14,782	14,782	16,344
	Total length of refined products pipelines (km)	5,656	8,868	9,257	9,334	9,437
	Total length of natural gas pipelines (km)	24,037	28,595	32,801	36,116	40,995
	Crude runs (10 ⁶ barrels)	850	829	904	985	1,012.5
Safety	Ethylene production (10 ⁴ tons)	268	299	361	347	369
Safety	Death rate caused by accidents (person/100 million working hours)	0.50	0.36	1.02	0.70	0.20
	Total accident rate (incidents/million working hours)	0.03	0.0264	0.0120	0.0326	0.0387

Category	Indicator	2008	2009	2010	2011	2012
Environment	Energy conserved (10 ⁴ TCE)	176	171	173	113	121
	Water conserved (10 ⁴ cubic meters)	5,336	3,188	2,865	1,744	1,926
	Oil discharged in waste water (tons)	779	701	698	642	604
	COD discharged in wastewater (tons)	19,751	16,949	18,741	17,731	18,005
	SO ₂ discharged in waste gas (tons)	123,500	105,044	114,200	111,321	111,015
Employee	Number of employees (10 ⁴)	47.8	53.9	55.3	55.3	54.8
	Percentage of employees receiving occupational health checks (%)	96	96	96	95	95
	Percentage of non-Chinese nationals in overseas hires (%)	92	94	94	94	94
Public welfare	Contribution to poverty alleviation (RMB 10 ⁴)	12,272	5,828	6,308	3,706	4,124
	Educational donations (RMB 10 ⁴)	12,968	3,782	3,458	11,928	9,151
	Donations to disaster relief (RMB 10 ⁴)	9,009	935	4,499	595	1,881
	Environmental protection (RMB 10 ⁴)	876	569	5,588	75	965

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)

Global Compact and Us

The Global Compact is a global framework initiated and advocated by the United Nations aiming at the promotion of sustainable development and the collective improvement of social well-being through responsible and innovative business practices. As a member of the UN Global Compact, we are committed to observing and supporting the Ten Principles advocated by the Global Compact in the fields of human rights, labor rights, environment protection and anti-corruption, using the Ten Principles to guide our practices in fulfilling social responsibilities. And we will continue to disclose our progress in keeping with the Ten Principles in the Global Compact in our annual report.

Ten Principles in the Global Compact		Corresponding sections herein
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights;	5.1 Employees’ Rights Investor FAQs
	2. make sure that they are not complicit in human rights abuses.	5.1 Employees’ Rights Investor FAQs
Labour Rights	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	5.1 Employees’ Rights Investor FAQs
	4. the elimination of all forms of forced and compulsory labour;	5.1 Employees’ Rights Investor FAQs
	5. the effective abolition of child labour;	5.1 Employees’ Rights Investor FAQs
	6. the elimination of discrimination in respect of employment and occupation.	5.1 Employees’ Rights Investor FAQs
Environment Protection	7. Businesses should support a precautionary approach to environmental challenges;	3.5 Addressing Climate Change Investor FAQs
	8. undertake initiatives to promote greater environmental responsibility; and	3.2 Heightening Safety Management 3.3 Promoting Energy Saving and Emission Reduction 3.4 Environmental Protection 3.5 Addressing Climate Change Investor FAQs
	9. encourage the development and diffusion of environmentally friendly technologies.	3.5 Addressing Climate Change Investor FAQs
Anti-Corruption	10. Businesses should work against corruption of all kinds, including extortion and bribery.	About PetroChina Investor FAQs

About This Report

This report illustrates activities the Company undertook in 2012 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 *Guideline on Preparing the Report on Performance of Corporate Social Responsibility* issued by the Shanghai Stock Exchange and *Environmental, Social and Governance (ESG) Reporting Guide* issued by the Hong Kong Stock Exchange. Furthermore, we continued to consult *Sustainability Reporting Guideline (Version 3.1)* released by the Global Reporting Initiative (GRI) and *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, 2012, 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 2012* on March 2013, 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) 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 to review PetroChina’s compliance with Sustainability Reporting Guidelines (Version 3.1) released by the Global Reporting Initiative and Oil and Gas Industry Guidance on Voluntary Sustainability (2010).

