About the Report

The Special Report on Social Responsibility for the Myanmar-China Oil & Gas Pipeline Project (Myanmar Section) issued by China National Petroleum Corporation (CNPC) provides an overview of the main achievements made by CNPC in fulfilling social responsibilities and striving to become an outstanding corporate citizen in Myanmar.

In preparing this report, we adhered to the principle of being objective, criterion compliant, honest and transparent. This report is published in three languages: Chinese, English and Burmese. In case of any divergence of interpretation, the Chinese version shall prevail. For convenience, various terms such as “CNPC”, “the company” and “we” are used in this report to refer to China National Petroleum Corporation.

This report is available in both printed form and electronic form. You may download the e-version at our website www.cnpc.com.cn. For a printed copy, please send an email to csr@cnpc.com.cn. For more information, please visit www.cnpc.com.cn/en/.

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About Us

CNPC is one of the world's major oil and gas producers and suppliers, as well as a globally renowned oilfield service provider and contractor in engineering and construction, with businesses covering exploration and production, refining and chemicals, natural gas and pipelines, marketing and trade, oilfield services, engineering and construction, equipment manufacturing, and financial services. CNPC ranked third among PIW's world's top 50 oil companies in 2015 and also in the Fortune Global 500 in 2016. The company has oil and gas assets and interests in 35 countries, and provides technical and construction services in more than 71 countries and regions.

CNPC has been present in Myanmar since 2001. Our partners include Myanmar Oil and Gas Enterprise (MOGE), POSCO DAEWOO Corporation, ONGC CASPIAN E&P B.V. (OCEBV), Gas Authority of India Ltd (GAIL) and Korea Gas Corporation (KOGAS). The Myanmar-China Oil & Gas Pipeline Project is our biggest investment project in Myanmar.

Corporate Philosophy

For a company, fulfilling its corporate social responsibility is not only a necessary path to achieve economic, environmental and social sustainability, but also an inevitable choice for its sustainable development; it is not only an external requirement to adapt to socioeconomic development trends, but also an internal requirement to enhance our sustainability; it is not only an important way to change our development mode and achieve scientific development, but also a strategic requirement for our international operations.

Upholding the mission of "Caring for Energy, Caring for You", we aim to achieve not only economic, but also environmental and social responsibilities, and strive to become an outstanding corporate citizen with higher profitability, stronger influence, and a greater contribution to society. We have never relented in our efforts to fulfill our social responsibilities, adhere to legal operation, be honest and trustworthy, save resources and protect the environment, insist on the people-oriented principle and build a harmonious enterprise, in order to give back to society and realize value sharing.
Contents

05 Chairman’s Address
06 Interview with President of South-East Asia Pipeline Company Limited (SEAP) of CNPC

50 Special Topic: Focus on Madè Island
56 Outlook

10 Creating Shared Value by Localization

12 Serving Local Industries
14 Providing Employment Opportunities
14 Training Local Talents
15 Local Procurement
Reducing Environmental Footprint
20 Interview with Chief Safety Officer of SEAP of CNPC
26 Bypassing Environmentally Sensitive Areas
26 Reducing Land Usage
27 Reducing Surface Disturbance with Cutting-Edge Technology
28 Ecological Restoration

Pipeline Operation Safety
32 Pipeline Construction Quality
33 Pipeline Integrity Management
34 Security Measures

Community Development
38 Interview with Public Relations Officer of SEAP of CNPC
42 Public Infrastructure
43 Education & Training
46 Drinking Water Safety
47 Health Care
48 Capacity Building
48 Cultural Exchange and Heritage
Myanmar-China Oil & Gas Pipelines Put into Operation

1. On April 10, 2017, the Myanmar-China Crude Pipeline transmission agreement was signed.
2. On July 28, 2013, the Myanmar-China Gas Pipeline was inaugurated and started to deliver gas from the western coast of Myanmar to China.
3. On April 10, 2017, the Myanmar-China Crude Pipeline project was officially put into operation.
I am very pleased to present you this report.

Myanmar is a country with brilliant culture and rich natural resources. As one of the major energy producers in Southeast Asia, Myanmar has been engaged in oil exploitation for over a century. In recent years, the country has made remarkable achievements in economic and social fields, with ambitious plans for economic development, livelihood improvement and equal access to energy. This market has attracted the attention of oil and gas companies from the whole world. CNPC has always attached great importance to Myanmar’s market, and started to participate in oil and gas cooperation programs in the country in 2001 with our partners by providing integrated solutions to oil and gas development and utilization. Complying with international standards and local laws and regulation, CNPC has successively carried out three oil and gas exploration projects in deep water areas and operates the Myanmar-China Oil & Gas Pipelines with partners including MOGE and POSCO DAEWOO.

As a successful international cooperation project, the Myanmar-China Oil & Gas Pipelines offers good commercial prospects and social benefits. It has diversified the import and export of Myanmar’s oil and gas, promoted industrial growth and the country’s urbanization progress with clean energy, and will play an important role in stabilizing the regional energy supply.

As one of the major oil and gas producers and suppliers in the world, CNPC is committed to building a global modern energy supply system together with its partners, in order to promote safer, cleaner, more efficient and sustainable energy supply, and facilitate harmony between energy, the environment and society. The development and utilization of natural gas is a strategic and growth-oriented project. We enjoy rich experience in the exploration & development, storage & transportation, and utilization of natural gas. Taking the opportunity of China’s Belt and Road Initiative, we are ready to deepen our oil and gas cooperation with Myanmar by giving full play to our advantages in technology, management and capital. We will work with our partners to provide high-quality energy for Myanmar’s socioeconomic development by sharing value along the oil & gas value chain.

CNPC will actively implement the UN 2030 Agenda for Sustainable Development, promote inclusive sustainable development, continue to integrate itself into the socioeconomic development process of Myanmar, create and share value with local stakeholders, and serve as an outstanding corporate citizen. We will seek to expand industrial cooperation, create more job opportunities, cultivate more talents, and develop the local industrial chain. We will attach more importance to observing the influence of production and operation on the environment and society, and actively participate in community development by further contributing to education, healthcare, water supply and power supply, in order to facilitate sustainable socioeconomic development and prosperity in Myanmar.

Finally, we would like to extend our sincere gratitude to people from all sectors of society in Myanmar for their support, and to our partners for their understanding and trust over the years.

We are grateful for your attention and we really value your comments.

Wang Yilin, Chairman of CNPC
The Myanmar-China Oil & Gas Pipeline Project is the first large oil and gas pipeline facility running from north to south in Myanmar. It is situated in areas with complex terrain, ecological diversity, and poor infrastructure. Therefore, the project faces great environmental and health risks in its construction, as well as limited local materials and human resources. All of these may contribute to higher operating costs. In addition, the project has the attention of various circles of Myanmar society as it is the largest foreign investment project since the start of the country’s economic reform. We need to learn about, analyze and satisfy various demands of the local residents and other stakeholders.

As it turns out, we have successfully tackled these difficulties and challenges together with our partners. The Myanmar-China Oil & Gas Pipeline Project will give a strong impetus to the country’s socioeconomic development. The successful operation of the project is mainly due to three aspects. First, the project is designed in close alignment with Myanmar’s socioeconomic development goals, in particular policy planning for energy development and utilization, which really conforms to the interests and sustainable development of Myanmar. Second, the project is operated in strict compliance with local laws and regulations as well as international practices; it adheres to high standards in HSE, local employment and other aspects. Third, transparent communication and consultation are maintained with the government, partners, communities and NGOs, so that we can learn about and satisfy the reasonable demands of all parties, and strive to be an outstanding corporate citizen.

Of course, we are keenly aware that we have much room for improvement. We are willing to accept supervision from all sectors and constantly improve our performance. Your comments and suggestions are really appreciated.

Jiang Changliang, President
What is your vision of this Project in Myanmar?

With the full transition of the Myanmar-China Oil & Gas Pipeline Project from the construction to operation period, the focus of our work will shift to its safe and stable operation. We are speeding up the training of local talents to provide a number of pipeline professionals with good management capabilities and strong technical expertise, so that they can be the backbone of the long-term management and operation of the project. We will continue to promote service outsourcing to local companies, develop the local supply chain, and enhance the sustainability of the industrial chain. We are also pleased to see the outstanding results of economic reform in Myanmar, which will make the country a rising star among Southeast Asian economies. This is an opportunity for us. We are willing to devote ourselves to economic development and energy utilization in Myanmar, and contribute to the integrated utilization of oil and gas in the midstream and downstream sectors.
Overview of the Myanmar-China Oil & Gas Pipelines

The Myanmar-China Oil & Gas Pipelines is an international cooperation project. The Myanmar-China Crude Oil Pipeline is jointly invested and constructed by SEAP and MOGE; their joint venture, South-East Asia Crude Oil Pipeline Company Limited (SEAOP), is responsible for its operation and management. While the Myanmar-China Gas Pipeline Project is jointly invested and constructed by SEAP, MOGE, POSCO DAEWOO, ONGC CASPIAN E&P B.V., GAIL and KOGAS; their joint venture, South-East Asia Gas Pipeline Company Limited (SEAGP), is responsible for its operation and management. Both joint ventures have adopted the General Meeting of Shareholders/Board of Directors for regulation and decision-making on major issues.

Operational and management structure of JV companies of the Myanmar-China Oil & Gas Pipeline Project
Myanmar-China Crude Oil Pipeline

The 771-kilometer long pipeline extends from Madè Island on the west coast of Myanmar to Ruli in the southwestern Chinese province of Yunnan, running through Rakhine State, Magwe Region, Mandalay Region, and Shan State. The Pipeline is 813mm in diameter and is able to deliver 12Mt/a upon completion of the Phase I project, and 22Mt/a upon completion of the Phase II project, with a total annual delivery of 2 million tons to Myanmar. A 300,000-ton crude oil terminal has been built, with an annual capacity of 22 million tons. On April 10, 2017, the Myanmar-China Crude Oil Pipeline project was officially put into operation.

Myanmar-China Gas Pipeline

The Myanmar-China Gas Pipeline starts at Ramree Island on the western coast of Myanmar and ends at Ruli in China’s Yunnan Province. Running in parallel with the Myanmar-China Crude Oil Pipeline, the crude pipeline is 1,016 mm in diameter with a distance of 793km in Myanmar. It can deliver 5.2 billion m³ per year upon completion of the Phase I project, and 12 billion m³ per year upon completion of the Phase II project. Pursuant to the cooperation agreement, four gas off-take stations (Kyaukphyu, Yenangyaung, Taungtha and Mandalay) were established to unload less than 20% of the pipeline’s total delivery in Myanmar. On July 28, 2013, the Myanmar-China Gas Pipeline became operational and started to deliver natural gas to the Myanmar market through its off-take stations.

Route of the Myanmar-China Oil & Gas Pipeline Project (Myanmar Section)
Creating Shared Value by Localization
Creating Shared Value by Localization

Localization is CNPC’s important strategy for global operation, and a critical way to realize the social value of the company. We exploit the potential of the whole production and operation process by giving full consideration to the economic and social planning of the local government, expectations of stakeholders and the actual economic and social conditions, in order to create and expand shared value with stakeholders.

In Myanmar, we are dedicated to serving local energy development, providing more employment opportunities for the community, improving the professional skills and management experience of local staff, and exploring and developing the potential of local supply chains.
Creating Shared Value by Localization

Serving Local Industries

The Myanmar-China Oil & Gas Pipeline Project is by far the largest oil and gas infrastructure in Myanmar. This north-to-south line has opened up a new import and export channel for Myanmar’s oil and gas. More importantly, it delivers the abundant natural gas resources in southern Myanmar and crude oil imports to major consumer markets in central and northern parts of the country. The connection between resources and the consumer market will help attract more international investment in upstream development and downstream utilization in Myanmar, and help transform the resource advantages in the southern part of the country into economic and industrial benefits. This will stimulate development of the local oil and gas industry, and improve people’s living standards and economic development. The Pipeline can provide raw materials and fuel for refining, natural gas terminal utilization and other downstream projects, meeting demand from society for refined oil products, electricity, chemicals etc. A growing number of people in Myanmar will enjoy higher productivity and a better quality of life fueled by cleaner and modern energy.

On September 18, 2013, Myanmar newspaper Seven Daily News reported that power generation in Kyaukphyu utilizing natural gas from the Myanmar-China Gas Pipeline has provided adequate low-price electricity to Kyaukphyu downtown residents and surrounding villagers. The paper said “The electricity price had once climbed up to 500 Kyats per 1kWh, but now it is much cheaper, attracting more people to apply for ammeter installation. In addition to the existing 3,800 ammeters, 2,000 more are waiting to be installed. Now, power supply at only 35 Kyats per 1kWh is available round the clock in Kyaukphyu.”

On December 1, 2013, Myanmar newspaper Eleven Daily reported on the role of gas supply in promoting local industrial production and residents’ daily life, titled Mandalay Gas Off-take Station of the Myanmar-China Gas Pipeline Distributes 2 MMcf of Natural Gas per Day. The paper said “Mandalay Gas Off-take Station of the Myanmar-China Gas Pipeline started to distribute 2 MMcf of natural gas per day to the local markets from November 24, mainly for users in the Kyaukse Industrial Zone. Half of the gas delivery is for a glass plant, which boasts an investment of more than USD 6 million, and produces 117 tons of glass per day with an annual production of 42,700 tons. This will effectively boost the local economy and employment.”
Fueling Myanmar’s socioeconomic development with clean energy

The Myanmar-China Oil & Gas Pipeline Project continuously delivers clean energy to central and western Myanmar through offtake points in Kyaukphyu, Yenangyaung, Taungtha and Mandalay. In Kyaukphyu, gas power generation is improving the living conditions of local residents and bringing additional power to the construction of the Kyaukphyu Economic Development Zone. In Mandalay, natural gas has been transmitted to the Kyaukse Industrial Zone. This has not only met industrial users’ demand for clean energy, but also helped upgrade product quality. The first group of users includes a float glass plant, a cement plant and the newly constructed natural gas power plant with an installed capacity of 100MW. Thanks to the clean and efficient natural gas, the float glass plant is able to meet market demand for products of higher quality, and the power plant will provide a reliable electricity supply for people in central Myanmar. In Yenangyaung, an important industrial base, natural gas from the pipeline will inject new vigor into this old industrial city.

“Kyaukphyu is rich in natural resources, and power supply is essential to turn the resources into products. In the urban district, we used to rely on diesel generators before the trunk power line was linked here. Some investors left due to the high power costs. Now, we are building a 230KV power station fueled by natural gas, which will be sourced from the Myanmar-China Gas Pipeline. Upon completion of the station, we will be able to supply power for Kyaukphyu and other cities in Rakhine State. We are utilizing natural gas to drive socioeconomic development and improve living standards in Kyaukphyu, and we plan to invite investors from home and abroad to participate in Kyaukphyu’s economic development and increase employment opportunities.”

“Power only used to be available in the urban district, but not in our village. It was totally dark at night, which was rather inconvenient for cooking or children’s study. When the gas pipeline was put into operation, the government honored its commitment for power supply. We now enjoy a 24-hour power supply for just 35 kyats per 1kWh. Even though there is no industry in such a small village, the conditions have been greatly improved. We can listen to the radio and get a lot of information and knowledge. I hope all Rakhine residents can enjoy such benefits as we do.”

“In the past, many people in the urban district depended on private power generators for power supply, which were very unstable but cost 800 kyats per 1kWh. I had a backup generator, but I did not like it because it was too noisy and disturbed the neighbors. Now, we are using natural gas for power generation, costing 70 kyats per 1kWh for merchants like us, and 35 kyats per 1kWh for ordinary residents. As a result, my appliance sales grew by 20%.

The government plans to build a special economic zone and develop the deep-water harbor in Kyaukphyu. Till then, the current gas power generators would reach a capacity up to 50MW. It would be great for Kyaukphyu’s economic development, and benefit retailers like me. Everyone is looking forward to it.”

U Kyaw Thu Soe
Former Mayor of Kyaukphyu

U Aye Kyaw
Head of Coconut Village, Kyaukphyu

Ko Oo San
Electric Appliance Retailer in Kyaukphyu
Providing Employment Opportunities

Considering the availability of local human resources, we have made a step-by-step plan on localized employment, in order to gradually increase the proportion of local staff. In the construction period, we required our general contractor to prioritize local employment, local social resources, and local subcontracting. In this way, we strived to provide more jobs for local communities, and increase the income of families along the pipelines. At the peak period of construction, we hired over 6,000 local staff, accounting for over 60% of our total construction personnel in Myanmar. With the commissioning of the pipeline, more local management and technical talents were trained for the project. By the end of 2016, the project’s localization rate reached 72%.

Training Local Talents

We strive to cultivate outstanding and professional local staff, particularly by training young employees, so that more local employees can work in the management, technical and operational sectors. A training center has been set up for local employees in Madè Island. We provide local staff with on-the-job training, and language and professional training through working with Yangon University, Southwest Petroleum University, Beijing Foreign Studies University, and other colleges and universities, and field practice at our pipeline subsidiaries. We also appoint experienced experts to instruct local employees through apprenticeships. In an effort to upgrade local employees’ expertise and cross-cultural capabilities, in 2015, we selected two Myanmar employees, Aung Hla Moe and Kaythi Khaing, to study for a master’s degree at Kunming University of Science and Technology in China. So far, many local employees have developed rapidly to become the backbone of our business. In particular, by the end of 2016, a total of 78 local employees had been granted the title of Outstanding Employee due to their excellent performance.

By the end of 2016, a total of 78 local employees had been granted the title of Outstanding Employee due to their excellent performance.
Local Procurement

We help to cultivate local subcontractors, material suppliers and service providers by giving priority to local enterprises in procurement based on the market conditions in Myanmar. A total of 226 local companies have participated in the construction of the pipelines, involving EPC projects in insurance, transportation, site construction, infrastructure, and social support. Local procurement cost accounted for about 25 percent of our total investment in the Phase I project.
Creating Shared Value by Localization

Aung Hla Moe has worked for the Public Relation Department of South-East Asia Crude Oil Pipeline Company Limited since September 2011. He is in charge of financial reimbursement for the department, as well as translation, photography, and video recording. He was awarded the title of “Outstanding Myanmar Employee” in 2013 and 2014.

Khant Nyar: I love my job

As one of the first Myanmar undergraduates to join the project, I need to improve my competence through continuous learning. I am improving my skills every day thanks to the company’s training programs. I love my job and I want to learn more to address new challenges. I will strive to become a more capable employee.

Khant Nyar graduated from Hmaw Bi Technology University in 2010, with a major in mechanical engineering. He joined the company in 2012, and works as a technical operator at Mandalay Pump Station.

Aung Hla Moe: I feel so proud

Since the day I joined the company, I have been helped and guided by my managers and colleagues. In this harmonious and modern working environment, I have learnt a lot, and adapted to the concept of the paperless office to enhance my work efficiency.

I have received training on photography and video recording in the company, and photographed pipeline construction with a working unit of a film team. I also took photographs and videos at a number of major events of the company.

The company respects local customs and the employees’ religious beliefs. In particular, it provides vacations to local employees for every local holiday, and organizes donations on the occasion of ethnic festivals, in which the Chinese employees also participate actively.

I enjoy medium or better-than-average compensation in the company. I am happy with this. Early in 2014, I was honored as an “Outstanding Myanmar Employee” in the company’s first year of evaluation. In 2015, I was awarded a scholarship by the China Scholarship Council to pursue a master’s degree at Kunming University of Science and Technology, which offered new opportunities for the development of my career. My colleagues admire me a lot, and I am very proud of myself.
Ma Su Tha Zin: I see the value in my work

I work happily with my experienced Chinese colleagues. We complete all work assignments in time and with great quality and efficiency. Praise from my colleagues always make me excited, and this has shown me the value of my work.

I hope that the company will make considerable progress, so that we can benefit more from it. The company has raised the salaries of senior employees who have made great contributions and excellent performance. Such recognition and encouragement has enhanced the employees’ unity and cohesion.

Aung Kyaw Soe: I will grasp various pipeline technologies as early as possible to make my contribution to Myanmar’s development

The Myanmar-China Oil & Gas Pipeline Project is a very important energy channel. It not only provides energy for our country, but also brings donations of materials for social welfare undertakings such as hospitals and schools, which contribute a lot to Myanmar’s development. In the future, I will continue to work hard and try to master different pipeline technologies, in order to make my contribution to Myanmar’s development.

Ma Su Tha Zin joined South-East Asia Gas Pipeline Company Limited in March 2011, and has worked in the General Office and the Administrative Center in Mandalay.

Aung Kyaw Soe graduated from Mandalay Technical University in 2011, with a major in petroleum engineering, and joined the company in 2012. He received Chinese and English language training at Yangon University of Foreign Languages and the Mandalay Confucius Classroom. He also attended a three-month oil and gas pipeline training and field practice in China. Now, he works in the Namhkam metering station under the Muse Administration Office.
Reducing Environmental Footprint
Reducing Environmental Footprint

We follow CNPC's global HSE culture, strictly abide by relevant laws and regulations on environmental protection promulgated by the Myanmar government, and implement the concept of environmental protection throughout the whole process of pipeline construction, in order to reduce the environmental footprint.
Reducing Environmental Footprint

To ensure the safe and sound operation of the pipelines, we make great efforts in technology, construction management and operation safety. According to the principle of “synchronized project development and environmental protection”, light detection and ranging (LIDAR) technology and trench-crossing technology are adopted to minimize the impact on the ground and vegetation.

In the design phase, our environmental design was reviewed by a third party environmental supervisor to ensure its compliance with environmental assessment and protection requirements. In the preparatory phase, we signed agreements with local entities for camp solid/liquid waste treatment, and checked if the environmental measures were maintained in place at pipe storage yards and construction camps. In the construction phase, we supervised the contractors in their implementation of environmental measures in various conditions. For instance, culvert pipes were laid to supply water for irrigation when work was taking place in paddy fields, and the farmland water system were restored in a timely manner after the construction work was completed.

How does the company guarantee that pipeline construction and operation are in compliance with high environmental standards?

How does the company guarantee the long-term safe and stable operation of the pipelines?

According to the requirements of Pipeline Integrity Management and the QHSE System, we basically realized a cathodic protection rate of 100%, and ensured pipeline safety. Over 100 personnel are assigned to patrol the pipelines and over 50 personnel supervise the valve chambers around the clock. Before each flood season, major potential hazards are checked and investigated; during the flood season, emergency rescue is provided in a timely manner, and after the flood season, hydraulic protection works are actively repaired.

100%

As required in pipeline integrity management and the QHSE system, we provided 100% cathodic protection for the Pipeline project
We have set up a standardized pipeline maintenance & emergency repair center with three maintenance & emergency repair teams, and formulated over 170 site disposal plans. All technicians and security personnel are organized to participate in skills training. In terms of pipeline safety, pipeline safety information is collected from all sources, in order to timely identify and handle any hazard, to constantly ensure the safety of the personnel and the pipeline.

We spare no efforts to protect the marine ecology during operations at the port. Multifunctional vessels and tugboats equipped with domestic sewage disposal units and oil-water separators are used to ensure the domestic sewage and oily sewage are discharged after disposal. By the end of 2016, no marine oil pollution or major ecological accident occurred.

### What is Cathodic Protection?

The buried pipeline is susceptible to corrosion, which may damage the pipeline. Usually, impressed current is applied to connect the pipeline with the negative electrode of the DC power supply, making the pipeline a large cathode. Thus, the corrosion current is eliminated and corrosion is avoided.

### Waste classification

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<tr>
<th>Category</th>
<th>Example</th>
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<tbody>
<tr>
<td>Non-recyclable waste</td>
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<tr>
<td>Recyclable waste</td>
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<tr>
<td>Plastic waste and oil waste</td>
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<tr>
<td>Food waste</td>
<td></td>
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<tr>
<td>Other waste</td>
<td></td>
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<tr>
<td>Solid waste (e.g. glass bottles/cans)</td>
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<tr>
<td>Recyclable cement bag</td>
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<tr>
<td>Welding waste bin</td>
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</tbody>
</table>
The tugboats used on Madè Island have the following functions:

- **Seawater fire fighting system**: Spraying seawater and foams for fire fighting.
- **Deck cranes and waste bins**: Collecting waste at sea.
- **Oil dispersant sprinkler**: Spraying dispersants on sea to reduce the pollution of waste oil to the marine environment.
- **Lamor oil recovery system**: Recovering oil spills at sea to the slop tank on board.
What measures have been taken to ensure the health of employees?

We pay particular attention to all workplace hazards that may endanger employee health and safety. Due to the special field conditions in tropical regions, and the shortage of medical equipment, employees are prone to infectious and occupational diseases.

We have set up a health supervision mechanism and issued the Employee Health Instructions brochure for our staff to learn more about health and emergency rescue. Physical examinations are provided to all employees and the occupational disease rate has remained at zero. During the construction phase, health supervisors inspected construction sites and camps every month. Supervision meetings were held regularly to present the performance and problems related to occupational health. Contractors, project managers, technical supervisors and other relevant personnel attended special meetings to discuss major occupational health risks and measures to correct irregularities, in order to eliminate potential hazards endangering employees’ health.

We have made great efforts to prevent, identify, and control snake bites, malaria, dengue fever and other tropical diseases and endemics. From the start of the project in 2010 to December 2016, all employees were safeguarded from these risks to their health.

100%

Physical examinations are provided to all employees and the occupational disease rate has remained at zero.

From the start of the Project in 2010 to December 2016, no one was bitten by the snake, or suffered from dengue fever or malaria.
We conducted the Environmental Impact Assessment (EIA) according to the widely accepted Equator Principles and the World Bank Group Environmental, Health, and Safety Guidelines (EHS Guidelines) before construction. The pipelines were routed to bypass ecologically sensitive areas and heritage conservation areas in the design. The terms of environmental protection were included in the EPC contract, and professional environmental supervisors were invited to carry out environmental supervision and management of the contractor. The goal of “zero accidents and zero pollution” was achieved during the entire construction process.

**Nine Principles of HSE Management**

1. HSE shall be the priority in any decision-making
2. Safety is a prerequisite for employment
3. The company shall provide HSE training to employees
4. Managers of different levels are responsible for HSE in his/her business scope
5. Managers of different levels shall participate in HSE audits in person
6. Employees shall participate in hazard identification and risk control
7. All hazards shall be corrected promptly
8. All accidents and incidents shall be reported, analyzed and handled in a timely manner
9. Consistent HSE standards shall be implemented in contractor management

**Key elements of environmental supervision**

- Special meeting for environmental supervision
- Site inspection
- Weekly production scheduling meeting to present the contractors’ environmental performance
- Work permit system for operations in environmentally sensitive areas and with significant environmental impact
- Handling of environmental non-conformities
- Environmental risk identification and early warning

*Environmental Impact Assessment Report for Myanmar-China Gas Pipeline Project issued by Thailand's International Environmental Management Co., Ltd (IEM)*
PDCA Model under SEAP’s QHSE Management System

- QHSE commitments
- Review by QHSE Committee
- Supervision of QHSE management
- QHSE policies and plans
- QHSE report
- QHSE annual report
- Our commitments
- Supervision of QHSE management
- Policies and plans
- QHSE annual report
- QHSE policies
- and plans
- Review by QHSE Committee
- QHSE report
- QHSE annual report
- Effective system implementation
- Performance assessment
- Excellent individual QHSE performance
- Regular report of QHSE performance
- Establishment of QHSE management system
- Audit, review and continuous improvement of system
- Audit, review and continuous improvement of system
- Propose corrective actions through inspection and assessment
- Is our target achieved
- QHSE management system
- QHSE management program
- Check, detection and assessment
- Audit and management review
- Action and behavior
- Comparison of performance data and objectives
- QHSE performance
- Audit and review
- Implementation
- Supervision system
- Performance assessment
- Implementation
Reducing Land Usage

During construction, according to the principle of “minimizing land occupation and protecting arable land”, we optimized the pipe laying technical program, and used warning strips to separate land borders, in an effort to ensure the minimum width of the operating zone in different geographical conditions. For instance, in the Nantang River Grand Canyon, which is sandwiched between steep slopes and cliffs and has a maximum gradient of 79.5 degrees and a maximum drop of 203.5 meters, the pipelines are routed in a “V” shape. The operating belt width was reduced from 60 meters to 40 meters to minimize damage to vegetation; and temporary platforms were set up on the slope for the storage of raw materials to reduce the impact on arable land. All construction and transportation activities were conducted in the operating zone which had a width of 40 meters. In the forest area of the Rakhine Mountains and northern Myanmar, the pipelines were laid in the same trench, so that the width of the operating zone was reduced to 25 meters, reducing the forest occupation area by 92 hectares.

### Warning tips and posters are in place to remind our people of protecting the environment

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**60m ➔ 40m**

The width of the operating zone was reduced from 60 meters to 40 meters

**92 hectares ➔**

In the forest areas in Rakhine Mountain and in northern Myanmar, the Pipeline project were laid in the same trench, so that the width of the operating zone was reduced to 25 meters, cutting forest occupation by 92 hectares

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Bypassing Environmentally Sensitive Areas

Located in the tropical and subtropical zone, Myanmar enjoys diverse types of ecological environment, a long history and a brilliant culture. During the design stage of the pipelines, protection of ecological diversity and historical and cultural heritage was taken into consideration, as the pipelines were arranged to bypass pagodas, temples, schools, cemeteries, and wildlife and plant protection areas. For instance, a detour was made to avoid Mount Popa, a national religious and cultural tourist spot in Myanmar.
Reducing Surface Disturbance with Cutting-Edge Technology

We honor our commitment to building an environmentally-friendly enterprise and strive to reduce the impact of pipeline construction on the environment. For instance, in the reconnaissance phase, we used Light Detection and Ranging (LIDAR) technology instead of the traditional manual GPS technology to avoid damaging forest vegetation in the Rakhine Mountains and northern Myanmar. During oceanic trench-crossing construction, the directional drilling technology was adopted to replace heavy excavation. Both the entrance point and the excavated point were arranged on the land, thus the marine ecosystem and the mangroves on both shores were protected to the greatest possible extent.

Schematic diagram of LIDAR technology

Protection of mangroves during construction
Ecological Restoration

The "Land Restoration Requirement" was included in the special provisions of the EPC contract, with detailed requirements regarding its implementation. For instance, during trench excavation, topsoil and subsoil were separately stacked. Mellow soil was backfilled above immature soil to reduce soil fertility loss. According to different geomorphologies along the pipelines, appropriate soil and water conservation programs were developed to avoid the impact on crop cultivation in surrounding areas. Specifically, in the Rakhine Mountains and northern Myanmar, terraces and bamboo fences were used to prevent soil erosion. We repaired the operating zone in a timely manner to restore the landform and vegetation upon completion of pipeline construction. Concrete pouring was adopted in No. 1 Cliff and No. 2 Cliff on the north bank of the Myitnge River, the north bank of the Nantang River, and other areas frequently affected by geological disasters.

Practices of Ecological Restoration and Soil & Water Conservation during Construction
Myanmar-China Oil & Gas Pipeline Project (Myanmar Section)
Special Report on Social Responsibility

Farmland restoration in construction areas

Vegetation restoration

Green grass on both sides of Myitnge River
Pipeline Operation Safety
Pipeline Operation Safety

We are committed to the goal of “zero defect, zero injury, zero pollution and zero accident”. Pipeline operation safety is always the core of our work. This can be seen not only in our high standards and requirements for pipeline construction quality, but also in our huge amount of management and technical resources invested for operation safety.
Pipeline Construction Quality

The high standards we adhere to today can ensure pipeline safety tomorrow. The Myanmar-China Oil & Gas Pipeline Project is constructed with high standards of quality, and in strict compliance with the international standards of the American Petroleum Institute (API) and the American Society of Mechanical Engineers (ASME). Optimal construction resources were chosen through international competitive tendering. Many outstanding enterprises from Myanmar, India, China, the USA, Germany, the UK, France, the UAE, and Thailand have contributed to the construction of the safe, high-quality and environmentally-friendly Myanmar-China Oil & Gas Pipeline Project.

Top engineering and technology institutes were invited to conduct seismic safety assessment and geological hazard assessment, to ensure earthquake resistance of the oil terminal, pipelines and terminals on Madè Island. X70 steel was chosen for the project, as it is widely used globally in long-distance pipeline construction due to its mature and reliable technologies. Other components and spare parts were procured from well-known international manufacturers. For instance, ball valves and plug valves were supplied by Böhmer GmbH and Flowserve Corporation, respectively. The first pass yield of welded seams was 98.68%, and the pipeline depth was fully qualified. The Myanmar-China Gas Pipeline (Myanmar Section) Project won the gold award in the competition for 2016 High-Quality Petroleum Projects organized by China Association of Petroleum Engineering Construction.
Pipeline Integrity Management

The pipeline integrity management system is adopted to effectively prevent and control all types of risks during the operation of the pipelines. Using the system, we identified and assessed the risk factors in the design, construction, operation, maintenance and repair processes, and established appropriate preventive and control measures accordingly. Additionally, data integration information technology including SCADA was developed and used to prevent and reduce accidents in relation to pipeline quality and safety. This has ensured the safe operation of the pipelines in an economical and reasonable manner.

Relation and Difference between Integrity Management and Traditional Management

SCADA Technology

The Supervisory Control and Data Acquisition (SCADA) system is a complete scheduling management system that performs 24-hour real-time monitoring and data acquisition of the pipeline operation.

The SCADA system is composed of the control center, intermediate station control systems and block valve chambers. Through the communication system, the control center acquires real-time information along the pipelines, such as changes in pipeline pressure and flow, and abnormalities in pipeline operation.
Security Measures

Cooperation with Local Government and Community

The Myanmar-China Oil & Gas Pipeline Project is an important infrastructure in Myanmar. Its safe operation depends not only on the company carrying out the construction and operation, but also on the participation of the local government and community residents. Together with the Oilfield (Pipeline) Security Department of the Myanmar Government and local residents, we work to safeguard the operational safety of the pipelines.

We developed and improved the management system, defined all potential operation risks, and made uniform treatment measures and procedures. We organized special patrols, established a proper mechanism to communicate with local government and police, and provided local residents with pipeline protection knowledge, thereby forming a safety guarantee network supported by the company, government and the local community.
Local Residents - Pipeline Safety Guards

To ensure safe operation, we assign an inspector every 3-8 km along the pipelines. The inspectors are mostly local residents living along the pipelines, who are familiar with the local natural and cultural environment. Preventive measures are established to maintain pipeline safety, and the company responds quickly with these measures upon receiving any hazard report from the inspectors. When necessary, we will closely communicate with the local government and police to jointly guarantee pipeline safety.

Key areas of inspection

- If there is any large machinery operation within 500 meters on both sides of the operating zone.
- If there is any dredging or other operation in river or drain crossing areas along the pipelines.
- If there is any vehicle of over 20 tons within the operating zone.
- If there is any other behavior or incident which may endanger pipeline safety.
Community Development

We work with our partners to drive the development of communities along the pipelines. Through our investment projects in the community, we aim to enhance the local sustainable development capability, and focus on supporting education and public infrastructure projects such as roads, electricity, medical treatment, and water supply. By doing so, we strive to help more people get access to education and improve their quality of life.
Since the start of the project, South-East Asia Pipeline Company Limited (SEAP) has always adhered to the concept of "Goodwill, Integrity, and Win-Win" when fulfilling its social responsibilities. The company has set up the Social Benefit Program Committee to be in charge of social responsibility undertakings, and the Public Relations Office to implement community projects.

During project construction and operation, we have made continuous efforts to strengthen public relations management. For example, we pushed ahead with our community assistance programs, enhanced communication with local residents, promoted procurement from local sources, and created development opportunities for local employees. Through field visits to nearly 100 towns and villages along the pipelines, we tried to understand the actual demands of the community to ensure the effectiveness of our public welfare undertakings. Excellent contractors were selected through bidding. On one hand, we made community investment in livelihood projects such as safe drinking water, village roads, and medical services; on the other hand, we actively supported education in areas along the pipelines by improving the accommodation and teaching conditions in rural schools, and providing equal educational opportunities for all children in need of assistance.

SEAP has been building a diversified and friendly corporate culture. We respect the multi-ethnic culture in Myanmar, actively participate in local development, and promote mutual respect and understanding among employees through cultural exchanges. We comply with the provisions of the Foreign Investment Law of Myanmar to further strengthen the recruitment, training and development of local staff, and continuously raise the localization and internationalization rates of our employees.

We conducted retrospective assessment of the project’s environmental and social impact through household surveys and face-to-face interviews, which showed that there have been positive changes in the local community since pipeline construction. Specifically, local infrastructure and service conditions such as communications, road, traffic, schools, hospitals, and energy supply have been improved, and job opportunities have been increased.
How does SEAP communicate with the stakeholders?

We take the initiative to build communication platforms to interact with the government, media, NGOs, partners, employees, communities and other organizations and people that pay attention to CNPC SEAP. Upholding the principle of honesty, interaction, and equality, we have increased information disclosure through the Internet, television, print media and other channels, and established mechanism for stakeholders’ open participation and continuously improved it. In addition, we have taken the demands of all parties into account, and adopted both internal and external supervision mechanisms for the purpose of efficient and transparent decision-making.

With the support of stakeholders and the supervision of the media, we have perfectly completed the project. Specifically, we communicated with the local government regularly to report project progress and seek feedback; we cooperated with Myanmar’s news media to hold four press conferences, and released the Myanmar-China Oil & Gas Pipeline Project Manual and responded to public concerns on land compensation, pipeline safety and social responsibilities; we solicited views from partners to ensure the effective progress of the project; and we listened to the demands of residents along the pipelines to protect their reasonable interests.

Regarding land compensation, we adhered to standardized operations, and formulated the compensation program based on the opinions of local government, partners and villagers in a manner of “compensation before land utilization”, to guarantee the interests of local resident. Moreover, we released information on land compensation in a timely manner to ensure transparency.

With the progress of the project, we will strive to build a more convenient and effective communication platform. All stakeholders are welcome to provide suggestions for improving our communication efficiency, so that we could help build a better future for the people of Myanmar.

On July 26, 2012, Myanmar newspaper Popular News reported that SEAPG & SEAOP donated to help disaster victims in Rakhine State, and said “Myanmar-China Oil & Gas Pipeline Project sticks to the investment philosophy of fulfilling responsibilities and keeping promises, and devotes itself to the improvement of education, health care, and public health in Rakhine State.”
With the support of the Government of Myanmar, MOGE and other parties, we have established the Social Benefit Program Committee to jointly determine priorities in community investment and the rational planning of community projects after consultation with related parties. We cooperated with third parties from Myanmar to supervise the progress of the project, and made return visits to the community investment projects to ensure that the projects actually benefited the residents. Together with our partners, we have implemented 120 public welfare programs in Rakhine State, Magwe Region, Mandalay Region and Shan State, including building and renovating schools, assisting the construction of hospitals and health centers, building orphanages and nursing homes, and helping with the construction of power grids, roads and water facilities in remote areas. We also supported disaster relief work by providing supplies and humanitarian assistance to disaster victims, and advocated volunteering among our employees to participate in the community activities.

Social Welfare Donation Projects Completed Together with Our Partners

**Rakhine State**

- **Electricity Meter for Villagers**
  - Madè Island of Kyauk Phyu Township
  -皎漂县马德岛

- **Donation for Myochaung Village**
  -Kyauk Phyu Township
  -皎漂县

- **Donation for Lanpyat (Mingan)**
  -Kyauk Phyu Township
  -皎漂县

- **Donation for Shaochong Village**
  -Ann Township
  -安镇

- **Mainenance (BEHS-3) Donation for Kyaukphyu Township**
  -Kyauk Phyu Township
  -皎漂县

- **Donation for Pyaisayguy Village**
  -Kyauk Phyu Township
  -皎漂县

- **Donation for Duddown Township**
  -安镇
  -Kindergarten Donation for Ann Township

- **Donation for Nawtho Village**
  -Kyauk Phyu Township
  -皎漂县

- **Donation for Ohnntaw Village**
  -Kyauk Phyu Township
  -皎漂县

- **Electric Transmission Line Construction of Rakhine State**
  -Kyauk Phyu Area of Rakhine State
  -皎漂县

- **Donation for HinYue Village**
  -Ann Township
  -安镇

- **Donation for Hkamaung Village**
  -Ann Township
  -安镇

- **Donation for Myonbin Village**
  -Kyauk Phyu Township
  -皎漂县

- **Donation for Madè Island Baren Village**
  -Kyauk Phyu Township
  -皎漂县

- **Donation for Yeemadeng Village**
  -Ann Township
  -安镇

- **Donation for Oo King Village**
  -Kyauk Phyu Township
  -皎漂县

- **Donation for Niaochao Village**
  -Ann Township
  -安镇

- **Donation for Baichong Village**
  -Kyauk Phyu Township
  -皎漂县

- **Gebai Bridge of Kaban Island**
  -Kaban Island of Kyauk Phyu Township
  -皎漂县卡班岛

- **Road Donation for Madè Island**
  -Kyauk Phyu Township
  -皎漂县

- **Fishing Net**
  -Madè Island of Kyauk Phyu Township
  -皎漂县马德岛

- **Donation for Madè Village**
  -Kyauk Phyu Township
  -皎漂县

**Investment in Community Projects by Category**

- **Education 59%**
- **Medical Treatment 24%**
- **Welfare Facilities 11%**
- **Infrastructure 6%**

**Community Development**
### Magwe Region

<table>
<thead>
<tr>
<th>Township</th>
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</tr>
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<tbody>
<tr>
<td>Nawnghkio</td>
<td>Procurement of Solar Electric Source</td>
</tr>
<tr>
<td>Namhan</td>
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<td>Nawnghkio</td>
<td>One of Ambulance Donation for Muse Township People’s Hospital</td>
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<td>Mang Ton</td>
<td>Maintenance Donation for Mang Ton Township People’s Hospital</td>
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<td>Nawnghkio</td>
<td>(BEHS) Donation for Bangpway Village</td>
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<td>Nammadu</td>
<td>(Sub Centre) Donation for Sahkanda Village</td>
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<td>Kyaukme</td>
<td>(Sub Center) Donation for Jianigan Village</td>
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<td>Baden Gyi</td>
<td>Ward Donation for Singa Township Hospital</td>
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<td>Minbu</td>
<td>Home for aged Donation for Minnbu Township</td>
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<td>Minbu</td>
<td>(BEPS) Donation for ZinByunn Village</td>
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<td>Ngape</td>
<td>Power Grid Donation for Htanaungpinlae Village</td>
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<tr>
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<td>Tube well Donation for Phayajigon Village</td>
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<tr>
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<td>(BEHS) Donation for Magyigon Village</td>
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<td>(Sub Center) Donation for Oo Yin Gyi Village</td>
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<tr>
<td>Pwinbyu</td>
<td>(BEMS) Donation for Shadaw Village</td>
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<td>MyitDar</td>
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<tr>
<td>Myingyan</td>
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<tr>
<td>Thantraroo</td>
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<td>Muse</td>
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<td>(BEPS) Donation for Padan (Goatgyi) Village</td>
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### Myanmar-China Oil & Gas Pipeline Project (Myanmar Section)

- Special Report on Social Responsibility
- Fishery
Public Infrastructure

We are committed to improving the infrastructure in towns and villages along the pipelines, including power supply, communication facilities, water supply and road conditions. We have invested USD 315,000 to build 5.75 km of roads in Kyaukphyu and Madé Island of Rakhine State, and USD 88,000 to build a power grid in Htanaungpinlae Village, Torquay Town, Mandalay.

The original 66kV grid which supplied power for only 2-3 hours a day in Kyaukphyu of Rakhine State could not meet the residents’ demand for electricity. Therefore, in addition to delivering gas for local power generation, we and our partners jointly provided USD 10 million to the local government to construct a 132kV grid in Kyaukphyu. Now, all villages in the area have 24-hour access to electricity.

The major economic source of Natogyi, Mandalay, is from mango farming. In 2012, we learned from field visits in communities along the pipelines that the electricity shortage had affected the irrigation for mango planting. Therefore, we decided to set up power grids for the villages. Today, the local industrial infrastructure has been improved, and Htanaungpinlae village and other villages in Natogyi have access to electricity. The fruit farmers are no longer entirely dependent on the weather, and now enjoy a more stable income.

USD 10 Million

Together with our partners, we invested USD 10 million for the construction of 132kV grid in Kyaukphyu.
Education & Training

Through building and revamping schoolhouses, donating school supplies and providing training for teachers, we help to improve local educational environment, expand the basic education in rural areas and gradually promote the cultural and educational level of the communities along the pipelines. The improved educational environment has benefited nearly 20,000 Myanmar youths.

20,000 Myanmar youths

“Education is very important to Myanmar people. The youths can make a better living with knowledge and skills.”

U Min Myo Kyaw Hla
Headmaster of Monastical Education in Thanpankhine Village

Case

“Love without border”

Kyunn Oo Monastical Education in Kyunn Oo Village of Singaing Town, Mandalay, is a Monastical Education managed by the abbot of the temple. The students are mainly young orphan monks and a small number of children from neighboring villages. They study, chant sutras and receive education together. There used to be only one classroom and one dormitory constructed with donation from local residents. The 105 students had to go to classes in batches. In 2013, we invested to expand the schoolhouses and improve the school conditions. In 2014, new classrooms were put into use for more children to enjoy learning and living. “I am very grateful for what you have done for the children, thank you for the better schoolhouse, the school bags, and more importantly, the warmth and joy you brought to the kids. You have made them understand that love has no boundaries, and this spiritual wealth is more precious”, said the abbot.

Construction of the Taungyin BEHS in Kyaukphyu

The Taungyin BEHS in Kyaukphyu, Rakhine State, was founded in 1952. It is the largest school in the village covering kindergarten, primary school, junior high school and senior high school education. Going through several typhoons in so many years, the schoolhouses were out of repair and posed potential safety hazards. Additionally, there were not enough classrooms for the increasing number of students, as the 2,000 students had to attend classes by turns in the morning or afternoon. In 2011, we invested USD $680,000 with our partners, to build two classroom buildings and one administrative building, with total floorage of 2,500 m². Now all students can go to class at the same time, and the school has become the largest middle school in Rakhine State. On the day when the new classrooms were put into use, a student named Naing Kun Phyu said excitedly that “Seeing the new tables and new chairs, I really hope to come to school every day”. The school headmaster Daw May Min expressed that the new school is spacious and comfortable, and has ensured the teaching progress, and all students and their parents are happy with it.
In many villages we have aided, changes are happening - more and more children now receive education in spacious and bright classrooms, enjoying the opportunity to change their life with knowledge. The fragrance always remains in the hand that gives the rose, and seeing the children smile can make us most happy.

Education changes life
We are willing to promote such changes

Hman Bin Village
BEPS, Baden Gyi Township, Mandalay Division

Before

After
In 2013, we joined hands with our partners to invest USD 42,000 for the construction of Monastical Education, Thanpankhine Village, Nyaungcho Township, Shan State.
Drinking Water Safety

Through communication with village heads and monks living along the pipelines, we learned that the domestic water mostly came from rainwater for residents of Madè Island in Rakhine State, and Kyan Sot Village, Sansu Village and Phayagyigon Village of Kyaukpadaung Town in Mandalay Region. Consequently, the local residents had long suffered from intestinal diseases and skin disorders. Some people had to carry water from neighboring villages a few miles away. In response to the situation, we drilled water wells and provided drinking water facilities in order to help local residents to get clean and convenient water supply.
Health Care

We help to improve the local medical and health condition by assisting the construction of health centers, and funding medical technology training and medical equipment procurement. As a result, nearly 800,000 people have benefited from the more convenient and reliable medical services. Particularly, we trained medical personnel for Madê Island of Rakhine State, took the responsibility of paying their wages, and have provided free medical treatment for local villagers for over 5,000 person-times. In addition, we donated ambulances to the People’s Hospital of Muse County in Shan State to improve its emergency response capabilities.

800,000 people

Nearly 800,000 people have benefited from the more convenient and reliable medical services.

1. Hospital constructed with our donation in Singaing Township
2. Ambulance donated to Muse County Hospital, Shan State
3. We built Lounges for families of patients in Minbu Township Hospital, Magwe Division, and provided drinking water, wood beds and fans to improve the condition of the waiting area
Community Development

Capacity Building

We attach great importance to local sustainable development, and promote self-development capabilities of local agriculture and rural areas by providing skill training and extending the supply chain. For example, we helped farmers with their cultivation skills and enabled their earning from diversified sources, thereby increasing the rural household income and promoting the local development. We also carried out training on agricultural cultivation in Madè Island with satisfactory effects. For more information, please refer to “P50, Focus on Madè Island”.

Cultural Exchange and Heritage

Supporting cultural heritage

We also support the heritage of traditional Myanmar culture by sponsoring local traditional festivals and activities. For example, we donated 150,000 Kyats to Kyaukphyu for the activities celebrating the Water Festival, which ushers in Myanmar’s New Year.
Enriching the cultural life of local people

We make efforts to promote Myanmar-China cultural exchanges. We sponsored Myanmar National Broadcasting and TV Station and China International Radio and Television Station in the translation and broadcasting of two Chinese TV series, i.e. Mr. Jin’s Happy Life and Social Standing. Seven outstanding Myanmar actors and actresses (including Thiri Shin Thant and Si Thu Muang) were invited to China to dub Mr. Jin’s Happy Life. They are admirable for their professionalism, and are seen as envoys of Myanmar culture. In June 2013, this drama series was shown on Myanmar Television MRTV Channel and was welcomed by local residents. Htait Lwin Ko, a TV viewer from Mandalay, said that his family watched Mr. Jin’s Happy Life every Thursday and Friday, so did his neighbors. That was a fixed activity for them every week, and the storyline and the dubbing were hot topics among them.

“I have witnessed the company’s donation of materials to the residents and schools along the pipelines. That is not only material assistance, but also spiritual support for the local people. We feel that CNPC is really a responsible company.”

Sai Than Tun
Local employee at Muse Administration Office
Special Topic: Focus on Madè Island

Madè Island is an outlying island in the Bay of Bengal under the jurisdiction of Kyaukphyu, Rakhine State. With a land area of 12 km² and surrounded by waters with an average depth of 24 meters, the island is blessed with favorable geology, nature and water depth. This has been a virgin area for thousands of years, with Madè Island situated in Kyaukphyu Bay as a natural harbor. Residents of the island made their living from fishing and farming for generations. With the inflow of foreign capital for economic development encouraged by the Myanmar Government, the 300,000-ton oil terminal, which is jointly invested by CNPC and its partners, was built in Madè Island in 2009, in support of the Myanmar-China Crude Oil Pipeline. Over the past seven years, from the start to the operation of the oil terminal, we have become a part of the Madè Island community by making our own contribution to its prosperity. We are pleased to see that Madè Island is becoming one of the most important waterway hubs in Myanmar and even in Southeast Asia. Tremendous changes have taken place here. For instance, tap water is available in every village, replacing the rain water; all households enjoy power supply for 24 hours, instead of the previous 3 hours; no road existed before, but now roads connect nearly all of the villages; the establishment of 3G telecommunication base stations has ended the days when there was no mobile signal. Moreover, there are tractors and motorcycles, as well as new schools and clinics on the island.
Focus on Madè Island

Over 3,000 residents
Clean water was supplied for over 3,000 residents every year

5.6 km
In 2013, village roads with a total length of 5.6 km were built to connect 5 natural villages
Developing Port Logistics Industry

Our 300,000-ton oil terminal on Madè Island is not only a demonstration project for attracting foreign investment to Kyaukphyu Special Economic Zone (SEZ), but also an important infrastructure for port transportation. It will facilitate the construction of the deepwater port and promote the development of foreign trade in the locality. Relevant industries including electricity, hotels and communication are expected to experience rapid development as the local area turns into a fully functional logistics port.

Giving Top Priority to Local Employment

We give priority to local employment. We have investigated the young labor resources on Madè Island and provided them with skills training to enjoy more job opportunities. In the peak time of the construction period, we hired more than 1,000 local employees. Many villagers who used to make a living from fishing and farming have acquired new vocational skills, and started to earn more for their family by working for the project.

I make 300,000 kyats a month. I have bought TV, stereo, telephone and other modern household appliances for my family, and life is getting better.

Maung Maung Than
Villager of Ywa Ma from Madè Island who works for the project.
Providing Tap Water on Madè Island

The only source of fresh water on Madè Island is rain. Therefore the residents here suffered greatly from shortage of drinking water in dry season for lack of water storage facilities, which affected their health and lowered their living standard. On the Water Festival, people had to spread mud on each other instead of water. In 2012, together with our partners, we invested to build a public waterworks project on Madè Island, including a high pool with a capacity of 500 cubic meters, 6,060 meters of water pipes, and 15 water supply points covering five villages. It provides over 3,000 local residents with clean water on the island. The water is supplied from the reservoir invested and built by South-East Asia Crude Oil Pipeline Company Limited, with a storage capacity of 650,000 cubic meters.
Improving Traffic Conditions

For the fishermen’s convenience, we built the first access road to the village and three wooden bridges on the island. In 2013, a 5.6 km road was built connecting five villages.

U Htun Thaung

The contractor of the village road project on Madè Island

Promoting Public Welfare

We communicate with local residents to better understand their living environment and community development, and strive to improve their standard of living by carrying out socioeconomic assistance projects.

We invited agriculture and animal husbandry experts from Yangon to teach the villagers how to develop greenhouse vegetable farming and livestock breeding. As a result, life has been improved on the island and more than 200 local people benefited from the training.

We built dormitories for teachers on Madè Island and provided desks, chairs and other facilities in order to improve the education conditions. To help the children of migrant families get educated near their homes, we built dedicated schools and employed teachers for them.

Communication towers were donated for Madè Island with signal coverage of 12 km², ending the days of no mobile signal on the island.

Teaching local villagers husbandry skills
Outlook

In the future, upholding the philosophy of innovation, coordination, green development, opening up and sharing, we will expand mutually beneficial cooperation with industry peers around the globe as their preferred partner. We will continue to transform the mode of producing and utilizing energy, promote energy consumption in a low-carbon and efficient way, and vigorously develop our natural gas business, to supply quality and clean energy on a global scale and support inclusive and sustainable socioeconomic development.

We value the Myanmar market and cherish the achievements made in the project through joint efforts. Based on the Bangladesh-China-India-Myanmar (BCIM) economic corridor project, we will continue to work with our partners to ensure the safe and stable operation of both the crude oil pipeline and gas pipeline, in order to deliver high-quality energy to Myanmar and facilitate local economic and social development. Meanwhile, we will push forward our efforts in environmental protection, honor our commitment to "green and clean development", and promote harmony between people and nature.

Along with the operation of the project, we will employ more local staff and cultivate more professionals and management personnel, and facilitate their development through this platform.

We will make the utmost efforts to meet oil and gas demand in the Myanmar market. In addition to running the Myanmar-China Oil & Gas Pipeline Project, we will enhance our cooperation in the energy sector, promote the utilization of natural gas, and better serve local economic development with clean energy.

Upholding the principle of "Mutually beneficial cooperation for common development", we will actively communicate with our partners and stakeholders, take the economic development programs of the areas along the pipelines into full consideration, and promote public welfare in a systematic, sustainable and planned manner. We will continue to improving education and medical care as well as infrastructure development, such as water, electricity, telecommunications and roads along the pipelines, in order to bring more real and tangible benefits to people in the local communities.
2009  CNPC in Kazakhstan Sustainability Report

2010  CNPC in Sudan

2011  CNPC in Indonesia

2013  CNPC in Latin America

2014  Special Report on Social Responsibility for the West-East Gas Pipeline Project (2002-2013)


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