









The Leading Independent Coalbed Methane Producer in China 2017

可持續發展報告 Sustainable Development Report

> 亞美能源控股有限公司 AAG Energy Holdings Limited
> (Incorporated in the Cayman Islands with limited liability)
> (於開曼群島註冊成立的有限公司)

Stock Code 股份代號: 2686

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AAG Energy, the Leading Independent CBM Producer in China

亞美能源,中國煤層氣行業的領先者

Our Vision 願景

To be the leading independent E&P platform in Asia.

勵志成為亞洲領先的上游能源企業

Mission 使命

We are committed to providing a superior rate of return on our shareholders' investments in a socially responsible and environmentally sustainable way.

我們承諾以對社會和環境負責任的方式 為我們的股東帶來最大的回報

About AAG Energy Holdings Limited

AAG Energy Holdings Limited is an international energy company and a leader in China's coalbed methane ("CBM") exploration and development sector. It focuses on developing and optimizing the value of unconventional gas resources to supply clean energy to the Chinese economy. AAG Energy's key operating assets, Panzhuang and Mabi concessions, are located in the southwestern part of Shanxi province in the Qinshui Basin, which boasts the largest proved CBM geological reserves of any basin in China. AAG Energy's Panzhuang concession in partnership with China United Coalbed Methane Corporation Ltd., is the most commercially advanced Sino-foreign CBM asset in China and the first Sinoforeign CBM cooperative project to have entered full-scale commercial development and production. The Project has a designed annual production capacity of 500 million cubic meters. AAG Energy's Mabi CBM Project Phase I in partnership with PetroChina received the preliminary Overall Development Plan ("ODP") approval from NDRC in November 2013. The designed commercial scale capacity of Mabi Phase I is 1 billion cubic meters per year. With proven ability to commercialize CBM and a highly-respected management team, the Group has attracted support from leading international and Chinese investors.

關於亞美能源控股有限公司

亞美能源控股有限公司是一家在中國煤層氣勘探開發領域處於領先地位的國際能源公司,專注於非常規天然氣資源的開發及價值優化,為中國經濟供應清潔能源。亞美能源的主要運營資產潘莊及馬必區塊位於山西南部的沁水盆地,其煤層氣探明地質儲量居中國各盆地之首。亞美能源與中聯煤層氣公司合作的潘莊區塊為中國商業化程度最高的中外合作煤層氣資產,是中國首個進入全面商業開發和生產的中外合作煤層氣區塊,年設計產能為5億立方米。亞美能源與中石油合作的馬必煤層氣項目總體開發方案一期已於2013年11月獲得國家能源局的前期批復,一期商業開發年設計產能為10億立方米。憑藉其在煤層氣商業化進程中成功的經驗以及其優秀的管理團隊,亞美能源贏得了來自國際及國內一流投資機構的青睞和大力支持。



About This Report

關於本報告

The board of directors of AAG Energy Holdings Limited guarantees that this report does not contain any false data, misleading statements, or major omissions, and takes full responsibility for its authenticity, accuracy, and completeness.

AAG Energy Holdings Limited

June 2018

本公司董事會及全體董事保證本報告內容不存在任何虛假記載、誤導性陳述或重大遺漏,並 對其內容的真實性、準確性和完整性承擔全部 責任。

一 亞美能源控股有限公司

2018年6月

Time Period

This report covers data from 1 January 2017 to 31 December 2017. Some content exceeds this scope. In the 2016 AAG Energy Holdings Limited Annual Report, we disclosed our environmental, social, and governance information for the first time. This report is our first standalone report, and reports of a similar nature will be released on a regular basis in the future.

• Scope of the Report

This report includes AAG Energy Holdings Limited and our two subsidiaries, Sino- American Energy Inc. and Asian American Gas, Inc.

• Data Specifications

Data were mainly sourced from official documents, statistical and financial reports of the Company, as well as the environmental, social, and governance information collected from the Company's statistics, summaries, and audits. This report is available in Chinese and English. If there is any conflict or inconsistency between the two versions, the Chinese version shall prevail. Unless otherwise stated, the currency used is the Chinese Yuan (CNY).

References

This report was prepared based on the Environmental, Social, and Governance Reporting Guide of HKEx. We also referred the Sustainability Reporting Guidelines (G4) issued by the Global Reporting Initiative (GRI).

Reporting Specifications

Throughout this report, AAG Energy Holding Limited may be referred to as "AAG", "the Company", and "We".

Access to the Report

This report and information about our sustainable development activities can be accessed in the 'Sustainable Development' section of the AAG official website (http://www.aagenergy.com/zh-CN/).

• 時間範圍

本報告內容時間界限為2017年1月1日至12月31日,部分內容超出上述範圍。 於2016年度報告中,亞美能源控股有限 公司首次披露環境、社會及管治信息。 本報告為亞美能源控股有限公司發佈的 第一本獨立報告,未來將按年度定期發 佈。

• 報告範圍

本報告覆蓋亞美能源控股有限公司及兩 家附屬公司美中能源有限公司和亞美大 陸煤層氣有限公司。

• 數據來源

全部信息數據來自公司的正式文件、統計報告與財務報告,以及經由公司統計、匯總與審核的環境、社會及管治信息。報告發佈中、英文版本,如有內容不一致,請以中文版為準。如無特殊説明,貨幣單位均為人民幣元。

編製依據

本報告參照香港聯合交易所《環境、社會及管治報告指引》進行編寫,並適度參考全球報告倡議組織GRI可持續發展報告指南G4版本。

• 指代説明

為便於表述和方便閱讀,亞美能源控股有限公司在報告中的表述分別使用「亞美能源」、「公司」、「我們」。

• 報告獲取

您可以在亞美能源控股有限公司門戶網站 主頁的「可持續發展」欄目瀏覽本報告及 公司有關可持續發展活動的動態信息(網址:http://www.aagenergy.com/zh-CN/)。

Statement from the Chairman 主席致辭

2017 was a remarkable year for AAG. It was mainly based on the Company's robust business performance, including outstanding operations, competitive technical capabilities, strict cost control, and the management and workers possessing executive ability. Fulfilling corporate commitment to safety, environment and sustainable development on all fronts, Panzhuang and Mabi concessions saw a double-digit growth in their production and sales and cost dropping significantly. All this further consolidated our leading position in China's CBM industry. None of these achievements could have been made without the concerted efforts of our employees, partners and other stakeholders.

Nowadays, the trend of low carbon in global energy consumption is increasingly obvious. Natural gas will play an important role in converting high carbon to low carbon in global energy consumption with its development significantly faster than coal and oil. Since the implementation of the 13th five-year plan, the development of China's natural gas industry has stepped into a "new era". The Chinese government implemented the "coal-to-gas" policy in 2017. The policy directly promoted the growth of natural gas in terms of both demand and price, which was particularly noticeable in winter. The policy led to a 16% increase in total demand of natural gas compared to 2016. In 2018, the National Energy Administration will take further measures to encourage natural gas production and market reforms. These measures will support AAG to continue growing as China's leading CBM producer, reaching new heights in production and sales. We also have confidence in sustaining cost control and profitability increase, providing clean energy to communities, while bringing more returns to shareholders and other stakeholders.

2017年對於亞美能源來說是極為出色的一年,這主要基於公司強勁的業務基本面,包括出色的運營表現,富有競爭力的技術能力,嚴格的成本控制,以及具備執行力的管理層和員工。在全面履行安全、環境和可持續發展的承諾下,潘莊區塊和馬必區塊生產和銷售呈現兩位數增長,而且成本顯著下降,這一切更加鞏固了我們在中國煤層氣行業的領先地位。所有這一切成就的取得,是和我們廣大員工和合作夥伴及相關利益方共同努力分不開的。

當前,全球能源消費的低碳化趨勢日益明顯, 天然氣將成為全球能源由高碳向低碳轉變的油 「十三五」規劃實施以來,中國天然氣發展速度將明顯高於煤炭和石發展之 入「新時代」,2017年中國政府實施的「煤改克 政策直接促進了天然氣在需求和價格兩個方 大統氣不 有的總需求量較2016年上漲了16%。2018年 國家能源局將採取進一步的措施,以鼓勵天統 氣生產和市場改革。這些措施將支持亞美、 氣生產和市場改革。這些措施將支持亞美。 量和銷量上達到新高。我們也有信心繼續控制 成本和提高利潤率,在為社區提供清潔能源 同時給股東及其他相關方帶來更多的回報。

Statement from the Chairman 主席致辭

The CPC 19th Congress introduced the objectives and requirements of "speeding up reform of the system for developing an ecological civilisation, and building a beautiful China". It strongly promotes green development by spurring the development of energy-saving and environmental protection industries as well as clean production and clean energy industries. As a source of clean energy, the market development of CBM is in line with this national policy orientation. As a leading international energy company in the field of China CBM exploration and development, we have been making contributions to the sustainability of our country and society in the course of clean energy exploration and CBM business operation. In the meantime, we prioritise our own corporate sustainability in both business and management. On the one hand, we produce clean energy; on the other hand, we ensure employees' health and safety and give back to society.

「十九大」提出「加快生態文明體制改革,建設美麗中國」的目標與要求,大力提倡推進綠色發展,壯大節能環保產業、清潔生產產業、清潔能源產業。煤層氣作為清潔能源,其市場發展契合國家政策導向。作為一家在中國煤層氣勘探開發領域處於領先地位的國際能源公司,在清潔能源開採、煤層氣業務運營的過程中,我們為國家、社會的可持續發展積極貢獻自身企業自身的可持續發展,在開發清潔能源的同時保護員工的健康與安全、並回饋社會。

Safety is always our top priority. Protecting and improving the health and safety of personnel and the environment is one of the core values of AAG. We believe that occupational diseases, accidents at work, and environmental hazards are all preventable. We are doing our utmost to create a workplace without any accidents. In 2017, we achieved significant performance in health, safety and environment (HSE) and achieved a safety performance of zero accidents — no recordable accidents or lost time incidents happened during the year. In this regard, we have received many rewards and honors for safety and environment protection from the local government, which are the greatest recognition of the joint efforts of our employees and stakeholders.

安全永遠是我們的首要任務,保護人員的健康和安全及保護和改善環境是亞美能源的核心價值觀之一,我們相信職業病、工傷事故、環境事故都是可以預防的。我們盡心盡力地創建一個無任何事故的工作環境,2017年,亞美能,在健康、安全和環境(「HSE」)方面表現卓越,在健康、安全和環境(「HSE」)方面表現卓越,並取得全年零事故的安全績效一可記錄車故率和損失工時事故率均為零;同時我們還在也是對我們廣大員工和相關利益方共同努力的最大認可。

We always regard employees as the core asset of the Company. They play a pivotal role in our achievements in the CBM industry. Committed to urging all employees to live up to their potential, we provide them dynamic and effective training programs and career development planning, so that they can see their professional improvement, draw satisfaction from work, and contribute to the Company to the greatest extent possible. We will continue our endeavor to create a sound and people-oriented corporate culture and a safe and healthy work environment for our employees, while practicing our core values throughout our operations.

我們一向把員工視為公司的最核心資產,員工也是我們在煤層氣行業取得成功的關鍵要素之一。我們致力於促使所有員工發揮其最大潛能,為員工提供積極有效的培訓和職業發展規劃方案,使員工從工作中獲得職業素質的提升及工作的滿足感,並最大程度地為公司做出貢獻。我們將繼續致力於營造良好的、以人為本的公司文化氛圍,為員工創建安全和健康的工作環境,將公司核心價值觀貫穿於我們運營活動的始終。

Statement from the Chairman 主席致辭

2017 was also a year that witnessed AAG's refocusing on community responsibility and our promotion of local economies. We actively paid taxes to support local economic development. Under the same conditions, we preferentially selected local employees and suppliers and gave them training to support their development. We put a high value on giving back to the community by actively participating in public service and volunteer work. In 2017, AAG donated approximately RMB 543,500 to public service for communities.

2017年也是體現亞美能源社區責任與推動地方經濟發展的一年。公司在生產運營中積極主動納税,支持地方經濟發展;在同等條件下,優先選用當地承包商和供應商,培養並扶持其發展;高度重視回饋社區,積極投身公益事業、組織志願者活動。2017年度,亞美能源共計為社區公益投入資金543,500元。

In 2018 we still face challenges. Based on our outstanding achievements in all aspects in 2017 and our current solid financial strength, we have confidence in the realization of our goals and vision for the future. We are fully aware that our mission is to bring rewards to shareholders in a manner responsible for society and environment, and to actively take on corresponding social responsibilities. In the future, AAG will base itself more on national strategies, pay attention to environmental benefits, national economy and people's livelihood, and join hands with partners to face up to the challenges posed to society, energy, and the environment. We will continue to provide new clean energies to residents and industrial users by the development of CBM. We will continue to integrate the concept of sustainable development into our operations and make our contribution to the construction of ecological civilization and sustainable development of the communities where we operate.

2018年仍然將是充滿挑戰的一年,基於2017 年我們在各方面所取得的優異成績以及我們目前雄厚的資金實力,我們對未來目標和願景的實現充滿信心。我們充分認識到我們的使命是以對社會和環境負責的態度為股東帶來自標的社會和環境責任。未來,亞美能源將進一步立足國家戰略,關注是,心繫國計民生,携手合作夥伴,一起共,可對整個社會、能源和環境所面臨的持機、前人居民和工業用戶提供新型過煤層氣的開發,向居民和工業用戶提供新型的清潔能源,繼續將可持續發展的出我們應有的貢獻。

Hence, on behalf of the Board of Directors and shareholders, I would like to express my heartfelt gratitude to our employees and other stakeholders for their joint efforts in achieving our goals of sustainable development in 2017!

在此,我代表董事會和股東,向我們的員工和 其他利益相關方在過去的一年裏為實現我們可 持續發展目標所做出的共同努力表示衷心的感 謝!

Stephen Xiangdong Zou

Chairman

鄒向東博士

主席

About Us

關於我們

1. About Us

1.1 AAG Brief

AAG Energy Holdings Limited is primarily engaged in coalbed methane (CBM) exploration and development, and is a leader in China's CBM industry. As an international energy company that regards sustainability, social responsibility, and environmental protection as its top priorities, we place great focus on developing and optimising the value of unconventional natural gas resources to supply clean energy to China.

AAG's key operating assets mainly includes two CBM concessions: Panzhuang and Mabi. Both concessions are located in the southwestern part of the Qinshui Basin, in Shanxi, China, which boasts of the largest proven CBM geological reserves of any basin in China. AAG has partnered with China United Coalbed Methane Co., Ltd. (CUCBM) and China National Petroleum Corporation (CNPC) to develop the Panzhuang and Mabi concessions in Shanxi Province respectively.

The Panzhuang concession, developed by AAG in partnership with CUCBM, is the most commercialised Sino-foreign CBM asset in China. It is also the first Sino-foreign CBM project in China that realised overall commercialised development with a planned annual production capacity of 500 million cubic meters. The ODP Phase I of the Mabi CBM project in partnership with CNPC received preliminary approval from the National Energy Administration in November 2013 and has a projected commercial capacity of 1 billion cubic meters/year in its first phase.

Based on reports issued by Netherland Sewell & Associates Inc. (NSAI), an independent reserve certification company. AAG's net 1P and 2P natural gas reserves as at 2017 year end are 153.0 bcf and 617.6 bcf respectively, which represents a 43% increase over the net 1P of 107.2 bcf at 2016 year end, and an 12% decrease from the net 2P of 697.8 bcf at 2016 year end.

1. 關於我們

1.1 公司概況

亞美能源控股有限公司(以下簡稱「亞美能源」)主營煤層氣勘探與開發,在中國煤層氣行業中處於領先地位。作為一家將可持續發展、社會責任與環境保護作為重中之重的國際能源公司,我們專注於非常規天然氣資源的開發及價值優化,為中國經濟供應清潔能源。

潘莊區塊為亞美能源與中聯煤合作開發,是中國商業化程度最高處地程度最高數合作煤層氣資產。潘莊區塊是產的中外合作煤層氣區塊,年設中全的時分。亞美能源與中人為5億立方米。亞美能源與中人發展,一期已於2013年11月獲得國國發能源局的前期批覆,一期商業開發設計規模為10億立方米/年。

根據獨立儲量認證公司NSAI發佈的報告,截至2017年底亞美能源1P和2P天然氣儲量約分別為1,530億立方英尺和6,176億立方英尺,較2016年底的1P儲量1,072億立方英尺增長了43%,2P儲量6,978億立方英尺減少了12%。

About Us

關於我們

1.2 Key Sustainability Awards

- 2017 "Best in ESG Awards" (Small Market Capitalization Category), presented by BDO Limited
- 2017 "Excellent Enterprise in Environmental Protection Work Implementation", presented by the People's Government of Jincheng, Shanxi Province to Asian American Gas, Inc.
- 2017 "Advanced Collective in Production Safety", presented by the Qinshui Coal and Coalbed Methane Industry Bureau of Jincheng, Shanxi Province to Asian American Gas, Inc.
- "Green Leadership Category, Asia Responsible Entrepreneurship Awards" for 2016, presented by Asian Business Association
- "Finance Asia Achievement Award Best Project Finance 2015", presented by Finance Asia
- "Best Oil and Gas Deal in Asia Pacific 2015", presented by IJGlobal Awards
- "2015 Best Green Trade Enterprise in the Asia-Pacific Region", presented by Asia Pacific Oil and Gas Commission
- "Nobel Laureate Series Social Caring Awards for Green Excellence", presented by the Institute of Social Enterprise

1.2 主要榮譽獎項

- 由香港立信德豪會計事務所 (BDO Limited)授予2017年度 環境、社會及管治(ESG)最佳 表現大獎之優異獎(小型股上 市公司類別)
- 附屬公司亞美大陸煤層氣有限公司由山西晋城市人民政府授予「2017年度落實環境保護工作優秀企業」
- 附屬公司亞美大陸煤層氣有限公司由山西晋城沁水縣煤炭煤層氣工業局授予「2017年度安全生產先進單位」
- 由亞洲企業商會授予2016年 度亞洲企業社會責任「綠色領 導獎」
- 由《亞洲金融雜誌》授予2015 年度亞洲金融成就獎
- 由IJGlobal Awards授予2015 年亞太區最佳油氣項目融資 獎
- 由亞太石油天然氣委員會授 予2015年亞太地區最佳綠色 交易企業獎
- 由社會企業研究所授予諾貝爾獎學人系列:社會關愛企業計劃之《綠色社會關愛企業獎》

可持續運營

2. Sustainable Operations

As a leading international energy company in CBM exploration and development, AAG focuses on developing and optimising the value of unconventional gas resources to supply clean energy to China. We adhere to the concept and culture of promoting the synergetic development of the economy, society, and environment. As such, we conduct operations in a socially and environmentally responsible manner to pursue sustainable development.

2.1 Mission and Strategy

2.1.1 Our Mission

- We are committed to providing a superior rate of return for our shareholders' investments in a socially responsible and environmentally sustainable manner.
- We aim to contribute to China's economic growth by supplying commercial quantities of coalbed methane, a new source of clean and economically efficient energy, to local communities and industries.
- We aspire to maintain the highest safety standards across all our business functions.
- We are committed to developing an outstanding management team that endeavours to realise our Company's vision as well as enhance the wellbeing of our employees.
- We respect each one of our employees who we regard as key assets of the Company, and thus proactively provide training for their career development.

2. 可持續運營

作為一家在中國煤層氣勘探開發領域處 於領先地位的國際能源公司,亞美能源 專注於非常規天然氣資源的開發及價值 優化,為地方經濟供應清潔能源。公司 秉持促進經濟、社會、環境協同發展的 理念與文化,以對社會和環境負責任的 方式組織經營管理各項活動,追求與社 會、環境的共同可持續發展。

2.1 使命與戰略

2.1.1 我們的使命

- 我們承諾以對社會和環境負責任的方式為我們的股東帶來最大的回報。
- 通過煤層氣的商業開發,向居民和工業用戶提供清潔經濟的新型能源,為中國的經濟發展做出貢獻。
- 將高標準的安全管理貫 穿所有業務始終。
- 我們致力於為實現公司 的遠景規劃建立和培養 優秀的管理團隊,為員 工提供良好的工作和生 活環境。
- 我們尊重每一名僱員, 視員工為公司的主要財富,並為他們的職業發 展提供積極的培訓計 劃。

可持續運營

2.1.2 Our Growth Strategy

The Company has ample cash-on-hand and a focused growth strategy. We will maintain our competitiveness by implementing the following strategies:

- Acquire in-production and in-development assets of relevant scale and quality.
- Push to realize exploration potential and synergies through operating acquired assets.
- Build an international management team that boasts of connections, extensive oil and gas exploration and production experience, a proven track record, and multi-upstream expertise.

2.2 Integrity and Compliance

The Company has formulated Anti-Fraud and Reporting Policy as our highest standard for publicity, integrity, and responsibility in all affairs. We endeavour to build a corporate culture of integrity, and are committed to eliminating malpractice and fraud. The policy expounds the Company's principles in the prevention, reporting, and management of malpractice and fraud. It aims to promote the core values of the Company and guide the reporting of malpractice or corruption among employees, so as to regulate business activities.

The Company's senior management and internal audit department have the primary responsibility of preventing, supervising, and rectifying existing and potential malpractice. The Company has set up an Anti-Malpractice Commission, which comprises of the Chief Executive Officer, Chief Legal Officer, the head of the Internal Audit Department, and other senior management members selected by the Chief Executive Officer.

In 2017, the Company had no litigation cases relating to malpractice or fraud.

2.1.2 發展戰略

本公司擁有充足的資金儲備 和專注的增長戰略,通過實 施以下策略能保持亞美能源 的競爭力:

- 收購體量適合的生產與 開發階段資產。
- 通過運營收購的資產, 進一步擴充儲量儲備並 實現協同效應。
- 逐步建立一個人脉貫 通,油氣勘探生產經驗 豐富,有成功過往業績 的國際化管理團隊。

2.2 堅守誠信合規

本公司制定《反舞弊與舉報制度》, 作為所有事務中公開、誠信和責任 的最高標準,並致力於營造誠信和 反舞弊反欺詐的公司文化。制度闡 述了本公司在舞弊和欺詐的預防、 報告及管理方面的原則,旨在通別 宣傳公司核心價值觀,引導員及 公眾在對涉嫌舞弊或腐敗行為方面 的溝通方式,從而規範商業活動。

本公司高級管理層和內部審計部門 在預防、監管與糾正舞弊行為及潛 在舞弊行為方面有首要責任。本公 司建立反舞弊委員會,由首席執行 官、首席法務官、內部審計部門負 責人,以及由首席執行官指定的其 他高級管理層成員組成。

2017年,本公司未發生因舞弊或欺 詐引起的訴訟事件。

可持續運營

2.3 Sustainable Development Management

2.3.1 Sustainable Development Statement

We understand that the main objective of the Company is to maximise returns for shareholders whilst performing our social and environmental responsibilities. We work closely with Chinese organisations at all levels to jointly address social, energy, and environmental challenges, as well as to contribute to China's economic growth by supplying clean energy to residential and industrial end-users through the commercial development of CBM.

- We are committed to adopting fair labour practices in our workplaces and will abide by all relevant laws and industry standards.
- We are committed to providing a safe working environment to prevent work-related injuries, fatalities, or health impairment to our employees and contractors.
- We will maintain transparent and trustworthy relationships with all shareholders to facilitate mutual understanding on matters of common concerns.
- We will adhere to the philosophy of minimising the adverse impacts of our operations by being responsible to society, developing sustainably, and running our operations in a manner as environmentally friendly as possible.
- We are committed to enabling employees to reach their full potential, achieve job satisfaction, and maximise their contribution to the Company.

AAG's Corporate Social Responsibility (CSR) policy will be reviewed regularly to reflect our commitments, in line with the latest CSR concepts in China.

2.3 可持續發展管理

2.3.1 可持續發展理念

- 我們承諾,我們在工作場所將採用公平的行為準則並遵守所有相關的法律和工業標準。
- 我們承諾避免員工和勞務人員出現任何工傷, 致死事故以及健康損害。
- 我們將與所有股東保持 透明和互相信任的關係 並就雙方互相關心的問 題進行溝通以增進相互 瞭解。
- 我們將堅持對社會負責、可持續發展和環保的經營理念,開展生產活動,以減少生產所帶來的不利影響。
- 我們致力於促使所有員工發揮其最大潛能,從工作中獲得滿足感,最大程度的為公司做出貢獻。

我們將不斷修改本公司可持 續發展的內容,以使其與中 國不斷更新的企業社會責任 理念相適應。

可持續運營

2.3.2 Stakeholder Communications and Engagement

We attach great importance to communicating with our internal and external stakeholders. We regularly seek the opinions of employees, collect feedback from the management, as well as endeavour to understand the expectations of investors, shareholders, the media, regulators, and others. In response, we publish and disseminate our social responsibility concepts and practices through multiple channels, and take corresponding measures to meet the expectations and demands of our stakeholders.

2.3.2 利益相關方溝通與參與

Stakeholders 利益相關方	Expectations and Demands 期望與要求	Communication Channel 溝通方式
Government and	Implementing national policies, laws,	Reporting documents
Regulators	and regulations	Advice and suggestions
	Promoting local economic development	Special reports
	Driving local employment	Business cooperation
	Accelerating industry development	
政府與監管機構	貫徹落實國家政策及法律法規	上報文件
	促進地方經濟發展	建言獻策
	帶動地方就業	專題彙報
	推動行業發展	洽談合作
Shareholders	Deliver return on investment	Company announcements
	Compliance in business operations	Special reports
	Production safety	Site visits
股東	收益回報	公司公告
	合規運營	專題彙報
	安全生產	實地考察

可持續運營

Stakeholders 利益相關方	Expectations and Demands 期望與要求	Communication Channel 溝通方式	
Customers and	Fulfil contracts	Business communication	
Partners	Conduct business operations with	Customer feedback	
	integrity	Communication and discussion	
	Deliver high quality products and services		
客戶及合作夥伴	依法履約	商務溝通	
	誠信經營	顧客反饋	
	優質產品與服務	交流研討	
Environment	Emission compliance	Work reports	
	Energy conservation and emission	Statement submission	
	reduction	Investigation and inspection	
em ter	Ecological protection	/L = +D	
環境	合規排放	工作彙報	
	節能減排	報表報送	
	保護生態	調研檢查	
Employees	Maintenance of rights and interests	Employee symposium	
	Occupational health	Collective negotiation	
	Compensation and benefits	Democratic communication platform	
	Career development	piationii	
員工	權益維護	員工座談會	
	職業健康	集體協商	
	薪酬福利	民主溝通平台	
	職業發展		
The Community and the Public	Improvement of community	Official website	
the Public	environment	Company announcements Interview and communication	
	Public service and charity		
社區及公里	Open and transparent information	八司京主紹計	
社區及公眾	改善社區環境	公司官方網站	
	參與公益事業	公司公告	
	信息公開透明	採訪交流	

可持續運營

2.3.3 Identification of Material Issues

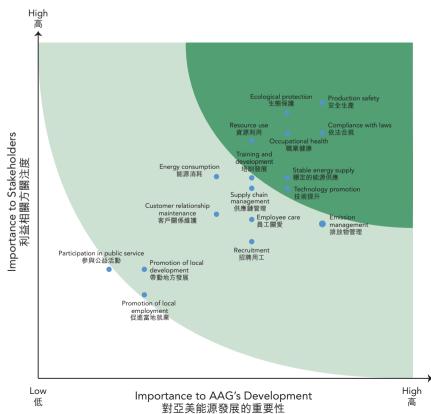
To understand the expectations and demands of our stakeholders, as well as enhance the pertinence and responsiveness of this report, with reference to the Environmental, Social and Governance Reporting Guide and the Sustainability Reporting Guidelines (G4.0), the Company has identified material environmental, social, and governance issues. We took full account of the opinions of our internal and external stakeholders, and identified the sustainable development issues through questionnaires that most concerned by stakeholders, including both the internal (employees and managers), and the external (media, regulators, partners and suppliers). This helped us ensure that the information disclosed in this report fully covers the material issues that are important to corporate development and are of primary concern to our stakeholders. In 2017, a survey was conducted on AAG's material issues of sustainable. A total of 88 questionnaires were collected, out of which 79 were from employees, 4 were from senior managers, and 5 were from external stakeholders. Based on material analysis, this report will respond to the issues above, the stakeholders' needs, and the major principles of the Stock Exchange.

2.3.3 重大性議題判定

為瞭解利益相關方的期望與 訴求,提升報告的針對性與 回應性,本公司依據《環境、 社會及管治報告指引》及《可 持續發展報告指南》(G4.0)的 要求,識別環境、社會和管 治議題,並進行重大性判 定。我們充分考慮各內部、 外部利益相關方的意見,通 過問卷的形式,瞭解內部員 工、內部管理人員;以及外 部媒體、監管機構、合作夥 伴、供應商等利益相關方最 關注的可持續發展議題,以 確保報告披露的資訊全面覆 蓋公司發展和利益相關方關 注的重點議題。亞美能源 2017年可持續發展重大性議 題調查問卷共回收問卷88 份,其中員工79份,高級管 理人員4份,外部利益相關方 5份。本報告將根據重大性分 析回應議題,回應利益相關 方的需求、以及聯交所的重 大性原則。

可持續運營





安全生產 清潔運營

3. Production Safety and Clean Operations

Ensuring production safety and green operations are our top priorities to achieve the sustainable development of AAG. The Company is putting the guiding principles from the 19th National Congress of the CPC into action by firmly establishing safety development ideas, building a production safety structure, focusing on energy saving and environmental protection, minimising any impact on the environment and ecology, as well as enhancing corporate responsibility for safe and green development.

3.1 HSE Management

AAG has always viewed the assurance of health, safety, and environment (HSE) as the foundation of the Company's steady development. We are committed to continuously improving our health, safety, and environment management systems, and actively fulfilling our objective of zero harm to employees and zero pollution to the environment. This demonstrates AAG's vision and position as a leader in the CBM industry. In 2017, the Company's HSE system was approved by the internationally renowned certification company DNV•GL (Det Norske Veritas and Germanischer Lloyd) and was awarded the ISO 14001:2015 Environmental Management System Certificate and the OHSAS18001:2007 Occupational Health and Safety Management System Certificate. AAG invested more than CNY 21 million in HSE for the whole year.

A clear HSE management framework is the foundation for the efficient implementation of the HSE management system. The Company has set up an HSE management committee, which is led by the project general manager, and functions to constantly review HSE guidelines and policies. The committee is fully responsible for rectifying potential safety hazards, organising HSE training, as well as conducting emergency drills. Independent HSE departments have also been established to supervise HSE management for projects. We encourage employees to proactively identify dangerous activities and unsafe conditions, to be fully prepared for emergencies, as well as to report accidents and emergencies in a timely manner. HSE performance has also been integrated into employee performance evaluations. In addition, the Company strictly control risks during project design, execution, construction, and operation, and constantly review all contractors' HSE compliance throughout the entire process.

3. 安全生產 清潔運營

亞美能源將保障安全生產、綠色清潔運 營視為公司可持續發展的首要任務,貫 徹十九大精神,牢固樹立安全發展理 念,全力打造安全生產格局,加大節能 環保力度,著力降低環境生態影響,強 化企業安全環保與綠色發展的責任意識。

3.1 不斷健全的體系建設

明確的HSE管理架構是高效執行 HSE管理制度的實施之本。公司下 屬項目均設有由項目總經理牽頭的 HSE管理委員會,負責定期審議 HSE方針、政策,並總體把控安全 隱患整改、HSE培訓、應急演習等 重要工作。各項目也設有獨立的 HSE部門,針對項目活動過程中的 HSE管理工作進行指導和監督。我 們鼓勵員工識別不安全行為和不安 全狀況,做好對應急事件的準備, 及時上報事故、突發事件和險情, 並將HSE績效列入所有員工的業績 考核內容。同時,公司嚴格把控項 目在設計、施工、建設和運營期間 的風險,定期對承包商HSE績效進 行考核。

安全生產 清潔運營

3.2 Production Safety

The Company attaches great importance to production safety and strictly complies with safety laws and regulations, as well as industrial standards. We issued clear regulations and instructions to ensure safe operations, provided appropriate tools and protective equipment for employees, established a safety inspection and audit system, and constantly conducted comprehensive occupational safety inspections and emergency drills.

In 2017, AAG had no work-related fatalities and did not lose any man-hours due to work-related injuries. 261 employees attended occupational health check-ups, and no one had any occupational diseases. By 25 December 2017, the Company had accumulated 5 million man-hours over a period of 3 years and 111 days with no lost time injury.

3.2.1 Site Management

The Company upholds the management objective of zero physical injuries. By formulating the *Stop Work Policy* and *Fitness to Work Procedure*, we ensure that employees and contractors' personnel have the right to stop working when their health, safety or environment is at risk. The Company takes full account of the health of employees and the staff of contractors, offering a safe and comfortable working environment for them.

The Company strictly implements *Permit to Work (PTW)* and *Management of Change (MOC)* procedures to achieve dynamic management of operating processes and site conditions to control risks all throughout the work process. The Company carries out periodic internal and external audits at all levels via comprehensive inspections, on-site work, and documents to correctly identify potential hazards.

3.2 安全生產

公司十分重視安全生產,嚴格遵守 安全法律法規和行業標準,制定清 晰的安全操作規程,提供適當的作 業工具和個人防護用品,設立安全 審核和安全檢查制度,定期舉行全 面的職業健康安全檢查及應急演練 活動。

2017年,公司的工傷死亡人數為 0,工傷損失工作小時數為0,職業 病體檢人數為261人,職業病發病 人數為0。截至2017年12月25日, 公司成功實現累計500萬工作小 時、3年零111天無損失工時事故 的安全業績。

3.2.1 現場管理

公司以無人身傷害作為管理目標,通過制定《停止工作的意义。工作適合性管理》制度,嚴格保障員工及承者理包責,嚴格保障。安全導力,以與人員或等。以時間,及時間,以對於人員的健康,及時間,以對於人員的健康保證。

The Company has established a *Contractor Management Process* to strengthen our HSE management over contractors. The standardisation and implementation of HSE systems are used as key assessment indicators and have been incorporated into the Company's annual contractor evaluation process. This enables us to effectively improve our contractors' HSE performance.

Case: Automatic Safety Monitoring Model

In 2017, the Company utilised an automatic control system for the Panzhuang project manufactured by Changzhou Kairui to gain remote control of the pumping equipment. Through the Kairui software, the Company was able to modify instructions and monitor all production data in real time. Meanwhile, an ABB data transmission system was applied to collect information, such as equipment operating data and fire alarms in gas gathering stations. This allowed us to implement remote on-site assistance, monitor equipment function in different stations, and conduct fire safety investigations. Such measures provide allround protection for safe on-site production.

公司設立《承包商管理關鍵流程》以強化對承包商的 HSE管理,並將HSE體系規範程度、 HSE 制度執行情況作為考核 指標納入承包商年中評價工 作中,從而有效提高承包商 的 HSE 表現。

案例:自動化安全監控模式

3.2.2 Emergency Management

The Company pays great attention to emergency management. To improve employees' ability to deal with emergencies, and decrease financial loss, environmental impact, as well as negative social influence to the greatest extent, the Company has formulated the 2017 Emergency Response Plan. The HSE department of projects meticulously implemented the Index and Checklist for Organisations Involved in Industrial Hazardous Waste issued by the Jincheng Environmental Protection Bureau, improving hazardous waste management systems, organizing personnel to conduct training on hazardous waste collection, storage and transfer management. In addition, emergency drills on hazardous waste spill were carried out according to the standards outlined in the 2017 Emergency Response Plan.

3.2.2 應急管理



Hazardous waste spill emergency response drill at temporary storage facility of Mabi Project MB項目暫存庫危險廢棄物泄露應急演練

3.2.3 Management of High-Risk Operation

AAG attaches great importance to the safety management of high-risk operation, such as drilling, fracturing, surface construction, confined space entry, etc. To promote the fundamental knowledge of drilling, strengthen HSE management of drilling site, promote HSE management level of drilling contractors, build production safety standards at drilling sites, in the third quarter of 2017, the Company carried out drilling safety campaigns on the drilling sites of the Panzhuang project and the Mabi project.

The campaign was led by the HSE department and consisted of two stages: training and internal audit, and inspection. The training was centred on popularising basic knowledge of drilling and introducing drilling HSE management. Employees were encouraged to take online tests after the training. The HSE department prepared a drilling internal audit plan, and then the internal audit team conducted a drilling HSE inspection. By considering the results comprehensively, the Company rewarded employees who scored high in the online tests as well as drilling contractors with excellent performance. Through the drilling safety campaign, the Company's drilling HSE management has been improved dramatically.

3.2.3 高風險作業管控

活動包括培訓和審核、檢查 兩個階段。培訓主要圍繞鑽 井基礎知識普及和鑽井HSE 管理知識介紹開展,並鼓勵 員工在培訓完成後進行在綫 測評。審查階段由專門的內 部審核小組編寫鑽井內部審 核計劃,還成立了聯合檢查 組,進行鑽井安全審核和鑽 井專項HSE檢查。綜合各項 結果,公司會對在綫測試分 數較高的員工,優秀的鑽井 承包商進行獎勵。通過開展 鑽井安全評比活動,公司鑽 井HSE管理水平得到進一步 提高。

安全生產 清潔運營

3.2.4 Safety Culture Development

In order to strengthen the safety awareness and improve the production safety skills of all employees, the Company actively carries out safety publicity and education initiatives. In 2017, the total HSE training for employees reached 14,572.25 hours, and per capita HSE training reached 22.66 hours.

By 4 September 2017, AAG had achieved the safety performance of 3 years without lost time injury. To celebrate this important milestone and stay focused on safety, the Company initiated the "Safety Day" activity on 5 September, to promote the Company's safety culture and express our commitment to achieve zero accidents. The Company's CEO, COO, general managers and partners of all projects were invited to participate in the Safety Day activities with the theme of "Zero Accidents". Through safety knowledge competition, traffic safety knowledge sharing, and a review of AAG's typical accidents, employees' safety knowledge was enriched, employees' safety awareness and safety skills were improved. The activities laid a solid foundation for employees' health and the Company's development.

3.2.4 安全文化建設

為強化全員安全意識,提高人員安全生產技能,公司積極開展安全宣傳教育工作。2017年,公司員工HSE培訓總小時數為14,572.25小時,人均HSE培訓小時數22.66小時。

2017年9月4日,亞美能源實 現了3年無損失工時事故的 安全業績。為了慶祝這個重 要的里程碑並且保持對安全 的關注,公司在9月5日首次 開展「安全日」活動,以提升 公司安全文化,表達致力於 實現「零事故」的決心。「安 全日 | 活動以 「零事故 | 為主 題,邀請了公司首席執行 官、首席運營官及各個項目 總經理、合作方共同參加。 通過安全知識競賽、交通安 全知識分享、亞美能源典型 事故回顧等活動,豐富了員 工安全知識,提高了員工的 安全意識和安全技能,為員 工健康、企業發展奠定了堅 實的基礎。



A photo of AAG Safety Day 亞美能源安全日活動照片

安全生產 清潔運營

3.3 Environmental Protection

The Company has always considered environmental protection to be equally important as business development. Since the convention of the 19th Congress of the CPC, ecological environment construction has become a core element of sustainable development in the nation. In the meantime, we understand that environmental sustainability is the basis of social and economic development. Therefore, we are committed to green-oriented development and strictly comply with national and local environmental laws and regulations related to CBM. We strive to minimise impacts on the environment during exploration, development, production, and operation, aimed to protect the ecological environment of surrounding communities.

3.3.1 Clean Energy

As a concomitant mineral resource with coal, CBM's heat value is almost equivalent to natural gas and can be utilised as an important supplementary energy to natural gas. Mainly composed of methane, CBM is also a cleaner, more environmentally friendly form of energy. Compared with coal, it contains a smaller proportion of impurities like sulphur and inorganic nitrogen, and produces far fewer pollutants such as sulphur dioxide, nitrogen oxide, and smoke, dusts after combustion; compared with conventional fuels, CBM has the lowest carbon-hydrogen ratio and lowest oxycarbide content in its combustion products. It helps reduce the discharge of greenhouse gas and will be emphatically developed by the government as a strategic resource.

3.3 環境保護

公司始終將業務發展與環境生態保護置於同等重要的地位,特別是十九大召開以來,國家將綠色發展、環境生態建設作為可持續環境生態建設作為可持續發展才是社會、經濟發展才是社會、經濟發展才是社會、經濟發展才是社會、經濟發展,因此我們堅持以綠色為氣樹關環保法律法規,致力於降區對環境產生的影響,保護周邊社區的生態環境。

3.3.1 清潔能源

煤層氣作為煤的伴生礦物資 源,其熱值與天然氣相當, 可以作為天然氣的重要補充 能源;同時,煤層氣也是一 種更加清潔的環保型能源, 其主要成分是甲烷,與煤炭 相比,硫和無機氮等雜質的 含量極低,燃燒後產生的二 氧化硫、氮氧化物、煙塵等 污染物排放量遠低於燃煤產 生的污染物;並且相比傳統 燃料,煤層氣的碳、氫比值 最低,燃燒產物中的碳氧化 物含量最少,有助於減少溫 室氣體排放,是國家重點開 發的戰略資源。

Comparison of Pollutants Discharged from CBM and Coal Burning Equivalent Heat Value 熱值相當的煤層氣和燃煤污染物排放對比表

Fuel	Discharge/ cubic meters 排氣量/	Carbonic Oxide/kg	Nitric Oxide/g	Sulphur Dioxide/g	Dusts/g
燃料	cubic meters	一氧化碳/kg	氮氧化物/g	二氧化硫/g	煙塵/g
3,000 cubic meters CBM 3,000 cubic meters 煤層氣	8.05×10 ⁴	0.0189	10.20	1.89	0.86
3.99 t Standard Coal 3.99 t 標準煤	10.87×10 ⁴	7.60	50.74	53.64	83.82

Reference: Hu Kun, Chen Mingqiang, Guo Yongcun. (2009). A Brief Discussion on CBM Recycling and Environmental

Protection, Coal Engineering, Issue 11.

參考文獻: 胡坤,陳明強,郭永存;

淺談煤層氣資源化與環境保護;煤炭工程2009

年11期

3.3.2 Clean Production

The Company is actively responding to the national *CBM Exploration and Development Action Plan*, making efforts to improve CBM exploration technologies and to innovate in clean production and operation. The Company strictly complies with pollutant discharge standards, aimed to continuously improve the discharge performance, to strengthen management, and to introduce new technologies in order to reduce pollution. In 2017, the Company's equivalent CO₂ emissions totalled 116,185.98 tons, significantly lower than in 2016.

Air Pollutant Emissions Management

The Company strictly adheres to national and local waste gas emission standards, strengthens waste gas pollution emission control, and optimises the mining process flow. The hydrogen sulphide was desulfurized by using atomization nozzle, super gravity machine, and desulfurization tower, to improve the quality of CBM from the source and lower waste gas output.

Water Pollutants Management

The Company strictly follows related national laws and regulations for the treatment and discharge of production wastewater and domestic sewage. At the same time, the Company reduces the discharge of sewage through purification and reutilization.

The Company advocates the reuse of domestic sewage, which is used for greening and road watering after undergoing successive treatment through the biochemical treatment system and reverse osmosis system. In 2017, the Company's domestic sewage production capacity was 20,725 cubic meters. 10,515 cubic meters of them was reutilized, with a reutilization rate over 50%.

3.3.2 清潔生產

大氣污染物管理

公司嚴格遵照國家及地區廢 氣排放標準,加強廢氣排放 治理工作,優化開採工藝 程,通過使用霧化噴頭、超 重力機和脱硫塔對硫化氫進 行脱硫,力爭從源頭提升煤 層氣品質,降低廢氣產生量。

水污染物管理

公司嚴格按照國家相關法律 法規對生產廢水和生活污水 進行專業的處理和達標排 放,同時通過污水淨化、二 次利用等方法,減少污水排 放。

公司推行生活污水再利用,生活污水通過生化處理建統,經兩級過濾後,進入企器和保安過濾器,再經及送系統處理後,用於公克道路灑水。2017年,公司生活污水產生量20,725立方米,二次利用使用量20,515立方米,二次利用率超過50%。

In 2017, the pumping water treatment volume of the Company was 134,453 cubic meters. Of this, the treatment volume of the Panzhuang project and the Mabi project was 66,463 cubic meters and 67,990 cubic meters respectively. The chemical oxygen demand discharge of industrial sewage went down by 3.4% from the prior year, to 5.04 tons.

Solid Waste Management

Based on the requirements set out in the Solid Waste Pollution Prevention Law of the People's Republic of China, the Company strictly regulates hazardous waste at well sites, gas gathering stations, and valve stations. We ensure centralised and safe disposal of hazardous waste, improving our management practices for hazardous waste in work sites.

In 2017, the Company propagated laws on hazardous waste and conducted relevant training programs on standardised management. We implemented standardised management systems of hazardous waste and linked this to our employees' performance evaluation. This system involves double checking and archiving all our hazardous waste records, and making the receipt and delivery records clearer and traceable with signatures. Hazardous wastes are meticulously classified. Mixing hazardous wastes with nonhazardous waste is strictly prohibited. Bins containing hazardous wastes must be processed to eliminate dangerous matters and avoid secondary pollution before being used in other places. Employees are required to fill up a form when transferring hazardous waste, which is then delivered to qualified contractors for unified disposal. Teams and individuals who did an outstanding job in hazardous waste prevention and control were rewarded by the Company.

Industrial waste and household garbage are stored separately and delivered to specific places for further disposal. In 2017, the Company produced a total of 10,861 cubic meters of drilling mud, 7,281 cubic meters of drilling cuttings, and 12.5 tons of waste engine oil. The amount of general industrial solid waste was 155,000 tons, and the amount of household garbage was 53.07 tons.

2017年,公司排採水處理量 為134,453立方米,其中潘莊 項目共處理排採水66,463立 方米,馬必項目共處理排採 水67,990立方米。生產廢水 化學需氧量排放量5.04噸, 比2016年排放量下降3.4%。

固體廢物管理

公司根據《中華人民共和國固 體廢棄物污染環境防治法》的 相關要求,嚴格規範井場、 氣站及閥組站的危險廢棄物 管理工作,確保危險廢棄物 的集中安全處置,提高生產 現場的危險廢棄物管理水平。

2017年,公司組織井場、站 場操作工開展危險廢物法律 宣傳及規範化管理培訓工作; 落實危險廢棄物規範化管理 責任制,並與績效考核掛鈎; 對危險廢棄物標誌進行核查 建檔,做到出入有記錄、簽 名可循;危險廢棄物嚴格進 行分類儲存,嚴禁將危險廢 物混入非危險廢物貯存區域; 盛装過危險廢棄物的垃圾桶 必須進行污染消除處理後才 可轉作他用,以免造成二次 污染;危險廢棄物轉移按規 定填寫轉移聯單,並統一交 由有資質的承包商進行回收 處置;同時,公司會對危險 廢棄物防治工作成績突出的 班組及個人予以獎勵。

生產垃圾和生活垃圾會進行 分類存放,轉移到指定地點 進行處理。2017年,公司產 生的各類危險廢棄物總量分 別為:鑽井泥漿10,861立方 米,鑽井岩屑7,281立方米, 廢機油12.5噸:一般工業固 體廢棄物產生總量為155,000 噸:生活垃圾產生總量為 53.07噸。

安全生產 清潔運營

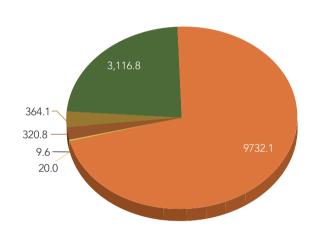
3.3.3 Resources Saving

The Company has adopted a variety of energy-saving measures, including resources reutilisation and energy-saving transformation, to conserve resources and help pave the way for our long-term sustainable development.

3.3.3 資源節約

公司採取多種節能政策,通 過資源重複利用、節能改造 等方式,實現資源節約,為 公司長久的可持續發展提供 充分條件。

Energy Consumption to Standard Coal in 2017 (ton) 2017 年各類能源消耗標煤折算量(噸)



- Purchased Electricity 外購電力
- Purchased Town Gas 外購城鎮燃氣
- Purchased LPG
 外購液化石油氣
- Purchased Gasoline 外購汽油
- Purchased Diesel
 外購柴油
- Self-Produced CBM 自產煤層氣

Energy Consumption of AAG 能源使用情況

		2017 2017年	Standard Coal Conversion Amount (ton) 標煤折算量 (噸)
Purchased Electricity (MW•h)	外購電力(兆瓦時)	79,187	9,732.1
Purchased Town Gas (m³)	外購城鎮燃氣 (立方米)	14,966	20.0
Purchased LPG (m³)	外購液化石油氣(立方米)	2,372.35	9.6
Purchased Gasoline (L)	外購汽油(升)	302,829	320.8
Purchased Diesel (L)	外購柴油 (升)	301,080	364.1
Self-Produced CBM (m³)	自產煤層氣(立方米)	3,387,796.18	3,116.8

 $MW \bullet h = megawatt hour$ $m^3 = cubic meters$

L = liters

安全生產 清潔運營

Energy Saving and Consumption Reduction

The Company attaches great importance to energy saving and consumption reduction and integrated the concept of energy saving into the entire process of production and operations. In 2017, the Company implemented a series of technological innovations, including transforming our frequency conversion compressor, "Pigging" technology, reusing lubricating oil after removing the coal powder, and so on. We also encouraged employees to save electricity as well as reduce travel and the use of vehicles in their daily life. A total of 18.3 MW•h of electricity was saved for the whole year.

The No.1 gas gathering station of the Mabi project and its surrounding wells had relied on power generated by gas-fired generators, which led to vast gas consumption. On 20 June 2017, a 10 kV national grid power supply system was established and put into use. This solved the power supply problem of all facilities around the No.1 gas gathering station, and has saved 653,153 cubic meters of gas consumption since its operation.

節能降耗

馬必項目1號集氣站及周邊 井場一直以來採用燃氣發電 機供電,需要消耗大量燃 氣,2017年6月20日,1號站 10kV國網供電系統正式建成 並投入使用,解決了1號站周 圍所有設施的供電問題,自 投產以來節約了燃氣使用量 約653,153立方米。



The Power Grid Was Successfully Established and Put into Operation 電網正式建成並投入使用

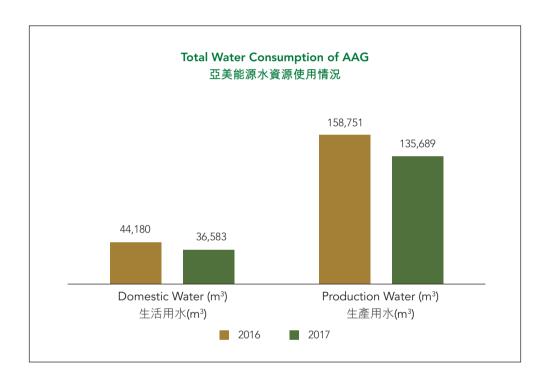
安全生產 清潔運營

Water Saving Management

The Company strengthens entire water conservation management process for water supply and consumption in residential and industrial areas. Taking measures such as technology innovation, process flow optimization, sewage reutilization, water saving education and so on, the Company constantly promotes water efficiency and therefore makes an overall improvement in water resources management.

節水管理

公司強化對生活和生產區域 水源、取水、用水的全過程 節水管理,通過技術改造和 工藝流程優化、推進污水二 次利用、開展節水宣傳等措 施,不斷提高水資源利用效 率,全面加強水資源管理。



安全生產 清潔運營

Case: Pumping Water Reutilization of the Mabi Project

The Company reutilises pumping water in the Mabi project. Some of the pumping water is transported to hydraulic fracturing well sites by water tankers. After filtration and purification, it can be used as fracturing fluid.

案例:馬必項目實施排採水 重複利用

公司在馬必項目對排採水進 行重複利用,將部分井場的 排採水通過水罐車運輸到水 力壓裂現場,經過過濾器過 濾,水質淨化後作為壓裂液 使用。



Transporting pumping water to fracturing well sites by water tanks
利用水罐車將排採水運輸到壓裂井場

3.3.4 Ecological Protection

The Company actively manages the surrounding environment of our projects according to the *Investigation Report on Environmental Protection Verification* and the *Management Plan for Ecological Environmental Protection and Recovery of Mines.* Through land-saving, engineering repair, land remediation, and vegetation recovery, we protect the ecological health around our projects and reduce the impact of our operations on our surroundings. In 2017, the reclaimed land area of the Panzhuang concession was 26,640 square meters with a rate of 53%. There was no land reclamation involved in the Mabi concession as it is still in the exploration stage.

3.3.4 生態保護

4. Win-Win Cooperation and Giving Back to Society

We cooperate with China United Coalbed Methane Co., Ltd. and China National Petroleum Corporation to conduct upstream development and production. At present, Panzhuang is already a mature production concession. In 2017, its total output reached 571.6 MMCM. The Mabi concession also achieved success in terms of production growth and development optimisation, and well prepared to ensure a stable supply of clean energy. In 2017, AAG regarded development of the national economy and people's livelihood as its own responsibility to ensure a steady supply of coalbed methane for the country.

4.1 Ensuring a Steady Supply of Energy

According to the National Energy Administration and China's "13th Five-Year Plan", there will be significant growth in CBM and natural gas over the next five years. In 2017, the 19th National Congress of CPC called for "spurring the development of energy-saving and environmental protection industries as well as clean production and clean energy industries", which is another beneficial policy for the energy industry. At present, coal still plays a dominant role in China's energy structure, while natural gas accounts for only about 7%. Based on the national target, China needs to gradually increase the proportion of natural gas from 7% to 10%, and increase the proportion of CBM from over 5 billion cubic meters to over 10 billion cubic meters. In this context, the CBM industry will achieve multi-fold growth. Policy-level support for further large-scale development of natural gas has a positive impact on AAG, and the Company will improve operational efficiency and cost control to ensure a stable supply of clean energy.

4. 合作共贏 回饋社會

亞美能源與中聯煤層氣有限責任公司和中國石油天然氣股份有限公司合作,進行上游的開發及生產工作。目前,潘莊已經是成熟生產區塊,2017年總產量已經達到5.716億立方米。馬必區塊也體現出在產量增長和開發優化方面取得的成功,在保障清潔能源穩定供應方面做好充足準備。2017年,亞美能源仍舊以國計民生為己任,保證為國家穩定供應煤層氣。

4.1 保障能源穩定供應

從國家能源局及我國「十三五」規 劃來看,煤層氣和天然氣在未來五 年有很大的增長。2017年,「十九 大」提出對「壯大節能環保產業、 清潔生產產業、清潔能源產業 | 的 要求,更是添加一項政策利好。目 前,我國能源結構仍舊以煤為主, 天然氣只佔約7%。而按照國家目 標,我國需逐漸將天然氣佔比從7% 升至10%,將煤層氣佔比從約50多 億立方米升至100億立方米以上。 在這樣的背景下,煤層氣產業約有 成倍的增長空間。政策層面支持天 然氣進一步大規模開發,這對亞美 能源的影響是正向的,公司將立足 於運營效率和成本的控制,保障穩 定的清潔能源供應。

In 2017, the total annual production from Panzhuang reached 571.6 MMCM (20.2 bcf), with a 13% increase year on year, average daily production in 2017 was 1.57 MMCM per day, a 13.4% increase year on year. The sales utilization rate in Panzhuang has remained very high at 98% during 2017. The promotion of "coal to gas" in this winter contributed to the steady supply of natural gas. Mabi's gross pilot production increased to 58.3 MMCM (2.1 bcf) compared with 35.0 MMCM (1.2 bcf) in 2016, the 2017 average daily production for Mabi was 160.0 MCMD, a 68% increase compared to 95.5 MCMD in 2016. By the end of 2017, there are 127 wells at various stages of pilot production in Mabi. The success that the Mabi concession achieved in 2017 in terms of production growth and development optimisation reflects how well-prepared it is in securing a stable supply of clean energy.

In 2017, there were zero customer complaints about our products and services and our customer satisfaction rate reached 100%.

4.2 Supply Chain Management

We attach great importance to the sustainable management of our Company, our suppliers, and our contractors. In addition, we evaluate the performance of potential suppliers according to their social responsibility, such as whether or not they have established an HSE system. AAG sets an example by leading its partners to jointly fulfil social responsibility and actively promote the sustainable development of the industry's supply chain.

In order to ensure the quality and safety of production, we strictly screen suppliers according to our requirements, and have included HSE performance in the supplier evaluation system. AAG developed a series of mechanisms, such as the Performance Assessment Form for Material Suppliers, the Performance Assessment Form for Engineering Services Suppliers, and the Management Procedures of Contractors Register, to screen and evaluate qualified suppliers. AAG also implemented a mid-year supplier evaluation to better ensure production safety and environmental protection.

2017年,潘莊區塊的總產量同比 2016年增長13%至5.716億立方米, 日產氣量同比2016年增長了13.4% 至157萬立方米每天,銷售利用率 穩定保持在98%。在「煤改氣」推 進實行過程中,為天然氣的穩定供 應提供助力。馬必區塊的總產量同 比2016年的3.500萬立方米增加到 5,830萬立方米,平均日產量同比 2016年的9.55萬立方米每天增長了 68% 達 16 萬 立 方 米 每 天。 截 止 2017年底,馬必區塊共有127口處 於不同階段的先導性生產井,馬必 區塊在產量增長和開發優化方面取 得的成功,體現出其在保障清潔能 源穩定供應方面已做好充足準備。

2017年,在我們所有的產品及服務中,客戶投訴數量為0。在2017年 所進行的客戶滿意度調查中,客戶滿意度達到100%。

4.2 供應鏈管理

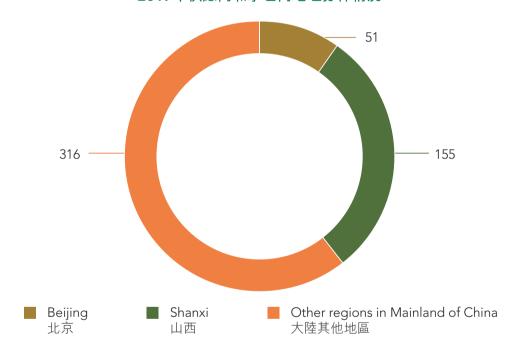
在供應商管理方面,我們高度重視 自身與供應商、承包商的可持續發 展管理工作,評估潛在供應商在社 會責任方面的表現,如將對方是否 建立HSE體系納入考核中。亞美能 源以身作則,帶動合作夥伴共同履 行社會責任,積極推進提升行業供 應鏈的可持續發展表現。

為保證生產質量與安全,我們嚴格 按照要求篩選供應商,並將HSE表 現納入供應商評估體系之中。亞美 能源制定《物資類供應商業績評院 表》、《工程服務類供應商業績評完 表》、《承包商備案管理程序》等制 度,篩選、評估優質合規供應商 時,本年度亞美能源實行年中供 應商評估工作,以更好保證安全生 產及環境保護工作。

Our goal is to comprehensively improve the management levels of suppliers and contractors, gradually developing a dynamic and comprehensive integrated management model. We strive to put the win-win management principle into action through building mutual beneficial relationships with suppliers to ensure our long-term, efficient, and high-quality operations. As an advocate of energy conservation and emission reduction, we also cut transportation costs by selecting local suppliers based on quality assurance and their qualifications.

我們的目標是全面提升供應商和承包商管理水準,逐步形成動態規範的全面融入式管理模式,力爭達可與供應方的互利關係的雙贏管理開東,為企業長期、高效、優質可開展生產營、管理活動提供了運輸管等。為提倡節能減排,減少運輸會上產經營品質和資質完善的前提下就近選擇。

Geographical Distribution of Suppliers and Contractors in 2017 2017年供應商和承包商地理分佈情況



4.3 Promoting Local Development

We proactively pay taxes as part of our production and operations to help boost the local economic development. We give priority to local employees and suppliers under the same conditions to cultivate and support their development. In line with the planning and development of the community, we spare no effort in public service and volunteering and are devoted to building inclusive communities to support the harmonious development of society. In 2017, we continued maintaining communications with local communities, and follow our excellent society-business cooperation tradition. In 2017, AAG's total investment in community and public services were about CNY 543,500.

4.3 社區關懷

我們在生產運營中積極主動納稅, 支持地方經濟發展;在同等條件 下,優先選用當地員工和供應商, 培養並扶持其發展;配合社區規劃 和發展,不遺餘力參與公益志原 事業,致力於建設包容性社區,助 力社會和諧發展。2017年,我們繼 續與社區保持良好溝通,延續以往 優秀的社企合作模式。全年共計為 社區公益投入資金543,500元。

AAG Community Policy

AAG's community policy is to build "sustainable development and inclusive communities."

AAG insists on adhering to its community policies to improve management level, and protect employee and community health and safety, to improve livelihoods of the affected communities and to take on and fulfil social responsibilities, with particular attention to vulnerable groups.

In order to promote sustainable development, we are committed to:

- Be consistent with applicable People's Republic of China laws and regulations, IFC Performance Standards (2013), and Equator Principles III (2013);
- Undertake continuous social impact assessment and risk evaluations to effectively avoid and control health and safety hazards to project employees and surrounding communities and coexist in a harmonious way with the local communities;
- Maintain good relationship with the affected communities and broader stakeholders;
- Adopt and implement human resources policies and procedures to be consistent with national employment policies and labour laws and regulations and with international standards (e.g. IFC Performance Standards, 2012);
- Avoid engaging in or supporting the use of child labour, forced labour or compulsory labour as defined in the ILO Convention 29;
- Work with our employees to maintain a healthy, hygienic and safe work environment, and proactively reduce occupational injury and illness risks, and promote employee health and well-being;
- Avoid or minimize both physical and economic displacement to the local community; where avoidance is not
 possible, to extent possible collaborate with the responsible government to restore the livelihoods of the
 displaced persons and ensure informed participation of those affected;
- Ensure that all employees are aware of their roles and responsibilities to comply with our social policy;
- Requires the same of contractors to manage social performances in line with this social policy.

亞美能源社區政策

亞美能源的社區政策是「可持續發展,包容性社區」。

亞美能源一直貫徹本社會政策以提高管理水平,保護員工和社區的健康和安全,通過承擔和實現社會責任來改善受影響社區的生活水準,尤其是對弱勢群體的關注。

為了促進可持續的社會實踐,亞美能源致力於:

- 與中華人民共和國的法律法規,2013版國際金融公司運行標準,以及2013年第三版赤道原則保持一致;
- 進行不間斷的社會影響力和風險評估,有效避免和控制給項目員工和周圍社區帶來健康與安全風險,保證與當地社區和諧相處;
- 受影響社區和更廣泛的利益相關方建立友好關係;
- 採取和實施與國家就業和勞動法規以及國際標準(例如:國際金融運行標準,2012版)一致的人力資源政策和程序;
- 避免參與或支持國際勞工法第29條規定的僱傭童工和強迫勞動;
- 與員工一起保持一個健康,衛生,安全的工作環境,積極減少職業傷害和患病風險,促進員工健康和幸福;
- 避免或最小化當地社區的人員搬遷和經濟上水平的下降,如果不可避免,儘可能的與當地負責政府協調來恢復 遷居的生活,確保他們的知情參與;
- 確保所有員工明確他們的作用和職責,以遵守我們本社會政策;
- 要求承包商也應遵守這些要求,根據本社會政策來管理社會操作。

4.3.1 Guarantee of "Warm" Winter

To reduce smog and meet the expectation of people's longing for the blue sky, white clouds, green mountains, and clear rivers, in 2017, China has established the Air Pollution Prevention and Control Plan in Beijing-Tianjin-Hebei Region and Surrounding Areas for 2017, and continuously promoted the project of "switch to gas from coal". However, since coal is playing a leading role in China's energy consumption structure, while natural gas energy is relatively scarce, the problem of gas shortage in Shanxi Province became particularly prominent after the large-scale implementation of the "switch to gas from coal" project. With a view on ensuring production safety, the Company strove to increase our output and provide high-quality CBM to local government departments with the most favourable price, so as to ensure a warm winter for the local people.

4.3.2 Coalbed Methane Supply for Communities

In an effort to change the way of residents' energy usage of coal burning, and guide residents to use clean energy, the Company provided CBM to local communities with the most favourable price. In 2017, we continuously provided 2,692,296 cubic meters CBM to Guobei Village, Douzhuang Village and Panhe Village in Jiangfeng Town, Qinshui County, which greatly reduced their need for coal. This reduced the discharge of carbon dioxide, sulphide, and dusts, reducing air pollution. It also effectively improved local air quality and helped create a cleaner and healthier living environment for the local residents.

4.3.1 保障暖冬

為了減少霧霾天氣,滿足人 民群眾對藍天白雲、青山綠 水的渴望,2017年國家制訂 了《京津冀及周邊地區2017 年大氣污染防治工作方案》, 持續推進「煤改氣」工程。由 於煤炭在我國能源消費結構 中佔據主導地位,天然氣能 源相對短缺,大規模普及「煤 改氣」工程後,山西省氣源短 缺問題尤為突出。公司在保 證安全生產的前提下努力提 高產量,並以優惠的價格在 讓渡企業經濟利益的情況 下,為當地政府部門提供優 質煤層氣,確保了當地群眾 過一個暖冬。

4.3.2 社區供氣

Win-Win Cooperation and Giving Back to Society 合作共赢 回饋社會

4.3.3 Caring for the Elderly

AAG cares for the vulnerable and advocates employee volunteers to actively send warm and love to the elderly in the nursing home of communities. On 25 May 2017, during the Dragon Boat Festival, more than 20 AAG employees and the administrative manager of AAG visited a nursing home — the Recreation Centre of Qinshui County — to serve senior citizens with hot meals and hand-wrapped sticky rice dumplings.

4.3.3 關愛老人



Caring for the elderly during Dragon Boat Festival 端午節敬老院獻愛心

Win-Win Cooperation and Giving Back to Society 合作共贏 回饋社會

4.3.4 Run with Love

The volunteer groups of the Company actively participate into public service organized by NGOs, to convey the public spirit and responsibility concept of AAG to the society. On 15 April 2017, the AAG Beijing Office participated in "Run with Love for the World Hemophilia Day", a charitable walking event organised by the Administration Department. Led by the Beijing Foreign Enterprise Volunteers Association, the event was held in the Beijing Olympic Forest Park. More than 20 AAG employees came with their families to raise funds for hemophilia patients and their families. Their act provided encouragement to those who suffered from rare diseases and vulnerable children.

4.3.4 為愛而走

公司志願者團隊積極積極參 NGO組織舉辦的公益活動, 向社會傳遞亞美能源公益精 神和責任理念。2017年4月 15日,亞美能源北京辦公室 員工積極參與了「RUN WITH LOVE 為愛而走 • 世界而友病 日」慈善健走大會活動。此項 活動由北京外企志願者協會 牽頭組織,在北京奧林匹克 森林公園舉行。亞美能源的 20餘名員工與家屬一起以健 走的方式滙聚公眾愛心,為 罕見病 一 血友病患者及家庭 募集善款,提供切實幫助, 通過行走的力量為罕見病患 者及弱勢兒童送上一份溫暖 的鼓勵。



Run with Love 為愛而走

Win-Win Cooperation and Giving Back to Society 合作共贏 回饋社會

4.3.5 Clean Drinking Water

The Company practices social responsibility by contributing to the health and growth of the youth. On 19 December 2017, AAG and the China Environmental Protection Foundation (CEPF) donated four sets of water purification equipment to Tu'wo township schools in Qinshui County, Jincheng City, Shanxi Province to ensure that students have access to clean drinking water at school. The schools are located in Qinshui County, which is also the location of AAG's CBM projects. The Schools include junior high, primary school, and kindergarten with a total of 138 teachers and students. In the past, the school had only one small water purifier in the canteen, which could not meet the needs of the teachers and students. Together with the CEPF, AAG provided the teachers and students with water purification equipment, replacement filters, and insulated cups that can supply enough for over 200 people. The donation not only ensured that teachers and students are able to drink hot and hygiene water in the winter, but also made them feel the warmth and love from AAG.

4.3.5 潔淨飲水

亞美能源關注青少年健康與 成長,用實際行動踐行社會 責任。2017年12月19日,亞 美能源控股有限公司聯合中 華環境保護基金會向山西省 晋城市沁水縣土沃鄉學校捐 贈淨水設備四台,讓學生們 在學校喝上甘甜的「放心 水 1。土沃鄉學校位於亞美能 源項目所在地沁水縣,學校 包括初中、小學和幼兒園, 現有師生共138人。原先只在 食堂設有一台小型淨水機, 遠遠無法滿足師生的飲水需 要。亞美能源携手中華環保 基金會為師生帶來了可以供 給200餘人的淨水設備、後續 更換的濾芯以及保溫杯,讓 老師和學生們能在寒冷的冬 天能夠喝到清潔和溫熱的飲 用水,感受到亞美能源帶來 的一絲溫暖。



Distributed vacuum bottles to kindergarten children 為幼兒園小朋友發放保溫杯

以人為本 共同發展

5. People-Oriented and Common Development

AAG has always believed that the stability of a business lies in each of its employees. We are people-oriented, respecting employees, training employees, and regarding employees as our partners. We safeguard the rights and interests of employees, ensure their safety and care for their well-being, with the vision of promoting corporate sustainable development in tandem with the sustainable development of employees.

5.1 Respecting Employees' Rights and Interests

AAG respects and protects the legitimate rights and interests of all employees. Through fair remuneration policies, scientific promotion channels and open communication, we nurture our talents and help them realise their full potential.

5.1.1 Employee Recruitment

As an employer who provides equal employment opportunities, we always uphold the principle of respecting and developing talents. We seek to attract talents from diverse cultural backgrounds and create tailored career development opportunities for employees. Our hiring process is transparent and fair throughout the recruitment, selection and hiring process, so as to ensure we recruit the most suitable talents.

The Company strictly implements the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China, and other laws and regulations. We not only attach great importance to attracting, motivating, and cultivating employees through offering fulfilling roles, but also strongly oppose to using child labour and forced labour. We enforce anti-discrimination policies so that all employees, regardless of their gender, nationality, ethnic, religion, or cultural background, have equal opportunities and receive equal pay for equal work.

5. 以人為本 共同發展

亞美能源始終清醒地認識到,一個企業的行穩致遠離不開每一名員工。我們以 人為本,尊重員工,培訓員工,視員工 為自己的合作夥伴。維護員工權益、保 障員工安全,關懷員工生活,以員工的 可持續發展促進企業可持續發展。

5.1 尊重員工權益

亞美能源尊重和保護所有員工的合 法權益,通過公平的薪酬政策,科 學的晋升渠道,靈活的溝通管理, 協助員工發揮潛能,培育優秀人 才。

5.1.1 員工招聘

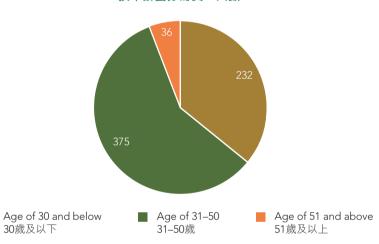
In 2017, the Human Resources department carried out recruitment activities through online recruitment, internal referrals, and headhunting services. The department screened resumes, organised interviews, and communicated with department heads about the qualifications of candidates. The department also conducted background checks on selected candidates.

At the end of 2017, the Company had a total of 643 employees, with a turnover rate of 5.65% for the year.

2017年,公司主要通過網絡 招聘,內部推薦,獵頭等渠 道開展招聘,進行簡歷篩 選,組織面試,與部門負責 人溝通候選人任職資質以及 對確定的候選人做背景調查 等招聘活動。

截止2017年底,公司擁有員 工643人,全年員工流失率為 5.65% •

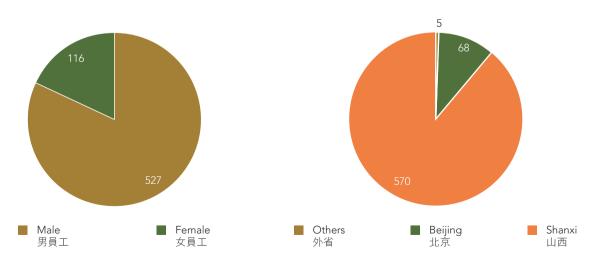




Number of Employees by Gender 按性別劃分的員工人數

30歲及以下

Number of Employees by Geographic location 按地區劃分的員工人數



以人為本 共同發展

5.1.2 Occupational Health

AAG believes that employees' health and occupational hygiene are of vital importance to us. We strictly follow the *Occupational Disease Prevention* and *Control Law* of the People's Republic of China, as well as other laws and regulations to support employees' occupational health.

The Company strictly comply with the Fitness to Work Procedure and the Stop Work Policy, we promote health and safety management in the workplace, organise regular health examinations for employees, strengthen occupational health management for site operators, establish health files, and continuously improve the working environment for employees in order to ensure their occupational health and safety. In 2017, the Company's occupational disease testing covered all employees who were at risk of occupational diseases.

5.1.3 Compensation and Benefits

AAG are committed to establishing an incentive remuneration system in line with the market. The Company regularly review and adjust the remuneration according to the market and the business performance of the Company, continuously improving the remuneration and benefit policies. The Company strictly implements performance assessment, linking employees' performance with their annual bonus and remuneration to incentive employees. It is also a way to recognise employees' efforts throughout a year. The Company pays various types of social insurance for employees, including endowment insurance, medical insurance, unemployment insurance, maternity insurance, and employment injury insurance, as well as pays housing accumulation funds for employees.

5.1.2 職業健康

亞美能源深信員工的健康和 職業衛生至關重要,嚴格按 照《中華人民共和國職業病防 治法》等法律法規執行員工職 業健康管理。

5.1.3 薪酬福利

以人為本 共同發展

5.2 Supporting Employees' Development

The Company takes into consideration both the needs of employees' development and the needs of business expansion. We offer our employees targeted training programmes across various occupational development channels. As we aim to improve our ability to enhance our employees' capabilities, we strive to provide a broad career platform and development space for all kinds of talents. We adhere to our people-oriented talent development concept and strengthen our process management. Through this, we hope to build a talent system that connects different levels of personnel, all of whom share the responsibility.

The Company aims to provide a working environment where employees can continuously learn, develop, and fully display their potentials. The Company offers a variety of training channels, such as on-job training, short-term assignments, business case sharing, special training, and so on. Through such channels, employees gain access to career-specific knowledge and skills. The Company's training principles are well-planned, well-organised, result-oriented, and clearly measured by standards.

5.2.1 Training System

The Company has established a complete learning and development system to meet the requirements of rapid development of personnel and business. We designed training and development plans related to employees' responsibility and personal development from several dimensions, including the improvement of employees' professional skills, personal competence and quality, and high potential talent team management and the model of leadership. During their employment, AAG will develop suitable training and development plans for employees according to their specific situations. Trainings include development on professional qualities, job skills, production safety and management competences, and other capabilities closely related to employees' job responsibilities.

5.2 助力員工發展

公司綜合考慮員工自身發展和業務 拓展需求,為員工提供有針對性 的、多元化的培訓和不同類型的職 業發展通道,努力為各類人才提供 廣闊的事業平台和發展空間,以 工能力提升帶動企業能力升級。堅 持以人為本的人才發展理念,強化 過程管理,形成上下聯動,責任共 擔的人才體系平台。

公司旨在提供一個可以讓員工不斷學習、發展和發揮個人最大潛能的工作環境。公司提供多種培訓渠道,如在職指導,短期任命,業務分享,專題培訓等。通過這些渠道,員工可以獲得與職業發展相關的知識和技能。公司的培訓原則是有計劃,有組織,以結果為導向並以明確的標準進行衡量。

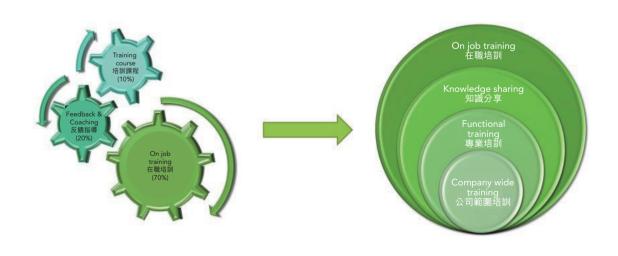
5.2.1 培訓體系

公發務設人隊維及計能定包安他的司展高員能管度個劃源適話全與完滿要業高力員關職情和、理職外人, 技力模崗培間為展作力緊勢才並能人型位訓, 員計技以密學才並能人型位訓, 員計技以密學及從、才幾職發亞工劃能及相與業建個團個責展美制, 、其關與業建個團個責展美制, 、其關

以人為本 共同發展



Learning and Development System Structure 學習與發展體系的結構



Learning and Development Model 學習與發展模式

The Company encourages employees to participate in training activities, as long as they comply with official working hours, are in line with the Company's strategy and objectives, and given that it does not affect their daily work. Employees should participate in training as planned, and department heads should support employees' training and cooperate with the HR department to track the training effects of employees.

In 2017, the Company initiated a policy to boost employee participation in training. Employees spent a total of 5,382 hours on level one interdepartmental training and external training organised by Headquarters. Average per capita training was 8.37 hours per year. 97.51% of staff participated in training. Internal training includes basic training and advanced training. The former aims to communicate the Company's policies to staff through rotation, on-thejob training, internal supervisor guidance, and external lecturer training, so that all employees, including new employees, know about the core values and policies of the Company. Advanced training are designed to improve the management's leadership, goal setting capabilities, and performance management capabilities. Thus, the management are constantly provided with skills they need to drive continuous development and growth of the Company. The Company encourages employees to attend external training according to their development goals, to improve their comprehensive abilities and professional skills. Training areas include law, HSE, business procurement, contract management, and so on.

2017年,公司鼓勵員工積極 參加培訓,其中,員工接受 的由公司組織的跨部門一級 培訓以及外部培訓共5,382小 時,人均8.37個小時,員工 培訓百分比為97.51%。內部 培訓,通過輪崗在崗學習, 內部主管輔導傳授及外聘講 師培訓的方式,組織了有針 對全員的公司政策溝通等的 基礎培訓,使包括新員工在 內的公司所有員工更瞭解公 司核心價值觀及公司政策等; 也有針對管理人員的領導 力、目標設定、績效管理等 高級培訓,旨在為企業不斷 發展壯大提供持續的管理人 才。外部培訓,根據員工發 展目標,公司鼓勵員工參加 提高個人綜合能力素質和專 業技能的相關培訓,如法 律、HSE、商務採購,合同 管理等方面的培訓。

5.2.2 Career Development

The Company proactively provides employees with development opportunities. We encourage employees to improve their professional knowledge, capabilities, and experiences, so as to improve the values of employees as well as the Company's. As for employees' occupational development, the Company has set up multiple promotion channels, ensuring that all employees on all positions can obtain independent, unimpeded, and stable career development. The Company carries out annual evaluations for employees' promotion. Evaluation process is the same company-wide to ensure that promotion meets the needs of the Company's business development and in accordance with fair and equitable principles.

The promotion evaluation process is carried out by the HR department. Promotion application forms and related supporting materials need to be submitted by the departments for review and finalization. The promotion cannot be carried out unless it is finalisation. Promotions must be approved by the talent management team, which is composed of senior executives and technical experts, to ensure consistency and fairness of promotion in the organisational structure.

5.2.2 職業發展

When recommending candidates for promotion, departments should consider but not limit their representations to the following basic guidelines:

- Needs of business development
- Employees' competence and potential for a higher ranking or position
- Employees' performance over the past two years
- The number of years the employee has worked for the Company on one's position, and the number of years requirement of the salary level
- Leadership assessment and the result of the 360-degree feedback (for team managers and higher positions only)

各部門推薦晋升員工時,需要考慮但不僅限於以下因素 作為晋升基本指導準則:

- 公司業務發展需要
- 員工的勝任能力以及任職下一級別或崗位的潛力
- 員工過去兩年的工作績 效表現
- 員工的服務年限以及在 當前崗位及工資級別的 工作年限
- 領導力能力測評以及 360度評估反饋的結果 (團隊經理級及以上的 級別的晋升有此要求)

Diagram of Career Development Paths 職業發展路徑圖

Human Resources	Administration	Finance	Legal Affairs	Safety	Procurement	Technology	Production
人事類	行政類	財務類	法務類	安全類	商務採購類	技術類	生產類
HR Assistant	Receptionist	Cashier	Legal Assistant	HSE Technician	Procurement Assistant	Assistant Engineer	Worker
人力資源助理	前台接待	出納	法務助理	HSE技術員	商務採購助理	助理工程師	操作工
HR Specialist	Administrative Assistant	Junior Accountant	Legal Specialist	HSE Specialist	Procurement Specialist	Engineer	Senior Worker
人力資源專員	行政助理	初級會計	法務專員	HSE專員	商務/採購專員	工程師	高級操作工
HR Analyst	Administrative Specialist	Intermediate Accountant	Senior Legal Specialist	HSE Engineer	Procurement Associate	Senior Engineer	Team Leader
人力資源分析師	行政專員	中級會計	高級法務專員	HSE工程師	商務/採購主管	高級工程師	班長/組長
HR Associate 人力資源主管	Administrative Associate 行政主管	Senior Account 高級會計	Legal Manager 法務經理	Senior HSE Engineer 高級HSE工程師	Procurement Manager 商務/採購經理	Chief Engineer 主任工程師	Section Chef 隊長
HR Manager 人力資源經理	Administrative Manager 行政經理	Accounting Associate	Legal Director 法務總監	用SE Associate HSE主管	Procurement Director 商務採購總監	Technical Manager 經理	Production Associate 生產主管
HR Director 人力資源總監	Administrative Director 行政總監	Financial and Accounting Manager 財務會計經理 Financial Director 財務總監		HSE Manager HSE經理 HSE Director HSE總監		Technical Director 總監	Production Director 生產經理

以人為本 共同發展

5.3 Caring for the Lives of Employees

The Company encourages employees to maintain healthy work-life balance. By organising various recreational activities, the Company provides a platform where employees can express themselves and enhance communications with each other. At the same time, through offering benefits such as free meals for front-line staff, we create a warm working environment for them so they feel valued and appreciated.

In 2017, the Company actively organised all kinds of recreational activities to enrich our employees' daily lives, and advocated a healthy, active approach to their personal and professional lives.

Case: The "Employee Assistance Programme" (EAP) — to Work Happily and Live Healthily

On 15 September 2017, the AAG "Employee Assistance Programme" (EAP) was officially launched. The purpose of the programme is to help employees and their families to achieve physical and psychological security, so that they can make better plans for healthy, efficient and happy lives. The EAP provides professional consulting services which target individuals and are fully confidential. AAG's regular employees and dependent family members can be directly assisted by a senior professional consultant, so that they better deal with challenges in work and personal life, and maintain their health and happiness.

From 19 to 22 September, we hung up posters at our offices in Jincheng, Beijing, and in project offices. Five meetings were held to introduce the EAP to employees. Employees gained an overall understanding of the programme through on-site listening, watching remote videos and after-meeting consultation. We also distributed EAP cards to every employee. A total of 175 employees participated in the introductory meetings and we hope this programme can help our employees to enjoy their work.

5.3 關愛員工生活

公司鼓勵員工保持工作與生活的平衡,通過開展豐富多彩的文體活動,為員工提供展示自我、增強溝通的平台。同時通過發放員工福利,如為一綫員工提供工作餐員工營造溫馨的工作環境,引領員工追求美好生活。

2017年,公司積極組織了各類文體 活動,豐富員工日常生活,倡導健 康向上的工作和生活方式。

案例:「幸福加油站」— 快樂工作,健康生活





EAP kick-off meeting group photos 「幸褔加油站 | 介紹會合影

Case: Team Building Activities at the Beijing Office

On 3 November 2017, the employees of AAG's Beijing office came to the outskirts of Beijing, and took part in various competitive activities with the themes of "moulding a team, relieving pressure, promoting communication and enhancing friendship".

These activities took the form a "rising of the tribes", where all employees were divided into two primitive tribes. Our principles were "friendship first, competition second, eliminating barriers, and improving team collaborative ability". All tribal members participated in all kinds of games, including treasure boxes, blindfolded archery, kangaroo dribbling, advancing in the dark, non-falling forest, and many more. These carefully selected games were interesting and contained a corporate cultural implication. All players in the games were full of enthusiasm, fought bravely and passionately, and cared for each other. Each participant made their own mental and physical contribution to the success of the whole team, and they were closely united for a common goal. Through this training, we were made fully aware that communication and strategic deployment are the keys to building an effective and trusting team, and that in order to achieve the team's strategic goals, it is very important to fully realise each employee's potential within a cohesive team. This training benefited us significantly and will be a valuable asset for every employee.

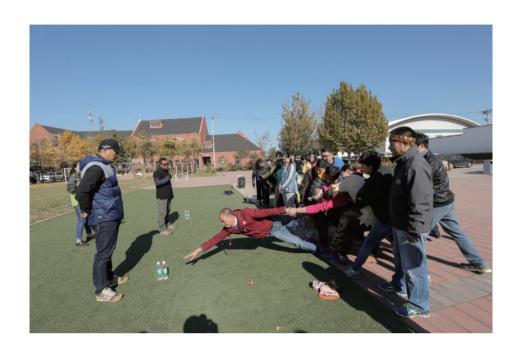
The activities not only made employees relaxed, but also enhanced our sense of collective honour and team spirit. They played a role in creating a working atmosphere of unity and friendship among departments and colleagues. At sunset, the team-building trip gradually wound down, leaving behind a trace of joy and not a little nostalgia.

案例:北京辦公室團隊建設活動

2017年11月3日,亞美能源北京辦公室的員工來到北京郊外,圍繞活動主題「熔煉團隊、排解壓力、促進交流、增進感情」,開展了各類趣味競技活動。

本次活動以「全力以計 — 部族崛 起」的活動形式將所有員工分成兩 大原始部落。大家秉承友誼第一, 比賽第二,消除隔閡、提高團隊協 作能力的宗旨,參與了寶箱爭奪、 蒙眼射箭、袋鼠運球、黑暗前行以 及不倒森林等競技活動。這些游戲 都是經過精心挑選具有一定趣味性 並包含企業文化寓意,在游戲過程 中隊員參與熱情高漲,奮勇拼搏, 充滿激情,相互關愛。每個人都為 了整個小組的勝利而付出自己的腦 力和體力勞動,為了共同的目標緊 密地團結在一起。通過此次活動, 公司充分認識到,要建立一個高效 充分信任的團隊,團隊的溝通能力 和戰略的部署尤為關鍵,如何實現 戰略,充分發揮每個員工的潛能和 增強團隊凝聚力將使實現團隊目標 變得更為重要。此次活動大家收穫 頗多,給每一位員工的啓發和感悟 都將是一筆寶貴的財富。

此次活動既讓大家身心得到放鬆, 又提高了大家的集體榮譽感和團隊 意識,為營造部門同事間的團結、 緊張、嚴肅的工作氛圍起到了促進 作用。帶著一絲欣喜,帶著一點留 戀,隨著夕陽西下,此次團隊建設 之行也漸漸落下帷幕。





Team Building Activities at the Beijing Office 北京辦公室團隊建設活動

Case: Participation in Local Government Cultural Activities

At 7:00 PM on 8 March 2017, the CPC Committee of Jiafeng Town, Qinshui County launched a show with the theme of "Women's Day of March and Bright Women's Festival" in the government courtyard to commemorate the 107th anniversary of International Women's Day as well as to enrich the cultural life of the women of the town. Township departments, administrative villages and organisations stationed in the town participated in this grand special performance.

The Company performed the "paso doble show", in which warm and cheerful music, focused expressions, graceful dance and confident paces all showed AAG women's active, enthusiastic, and heroic attitude and skills, Their exquisite performance not only won the applause of the audience and left a deep impression on us, but also vividly conveyed the central theme of a harmonious society, and struck a blow for the integration of enterprises and localities.

案例:參與地方政府文體活動

2017年3月8日晚七點,為紀念 「三八」國際婦女節成立107週年, 豐富全鎮婦女同胞文化生活,沁水 縣嘉峰鎮委員會在政府大院舉行了 「三月女人天,亮麗女人節」為主題 的文藝晚會。鎮直機關、各行政 村、駐鎮各單位參與了這場盛大的 「三八」國際婦女節的專題演出。

公司的《鬥牛舞》也參加了此次演出 活動。熱情歡快的舞曲、專注的神 情、優美的舞姿、自信的步伐無無 展示出我亞美能源女員工積極 情、英勇幹練的良好風貌,亞觀 源員工的精湛演出不僅贏得了觀 的陣陣喝彩,給觀眾留下了深刻印 象,更鮮明地弘揚了和諧社會的 旋律,為企地融合描繪了新的一 筆。



Paso Doble show 鬥牛舞演出

From 16 to 25 September, the AAG basketball team took part in the "Mid-Autumn Festival and National Day" basketball match held by the Jincheng branch of China United Coalbed Methane Co., Ltd, and took part in Jiafeng Town's "CUCBM Cup" basketball match. Our team won the "spiritual civilisation award" and the basketball prize issued by the Government of Jiafeng Town.

亞美能源籃球隊從9月16日開始至9月 25日,參加了中聯煤晋城分公司舉行的 「慶中秋•迎國慶」籃球比賽和嘉峰鎮「中 聯杯」籃球比賽,並獲得嘉峰鎮政府頒 發的「精神文明獎」。



Basketball match moments 籃球比賽精彩瞬間

	Indicator for Disclosure 環境、社會及管治指標	Page 披露計劃與説明
Scope: Env 環境		
A1: Emissio 排放物	ons	P22–24
related	on:	
(a) 政策;	品室氣體排放,向水及土地的排污、有害及無害廢棄物的產生等的: 及 行人有重大影響的相關法律及規例的資料	
A1.1	The types of emissions and respective emissions data 排放物種類及相關排放數據	P23–24
A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility) 溫室氣體總排放量(以噸計算)及(如適用)密度(如以每產量單位、每項設施計算)	P23
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility) 所產生有害廢棄物總量(以噸計算)及(如適用)密度(如以每產量單位、每項設施計算)	P24
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility) 所產生無害廢棄物總量(以噸計算)及(如適用)密度(如以每產量單位、每項設施計算)	P24
A1.5	Description of measures to mitigate emissions and results achieved 描述減低排放量的措施及所得成果	P23–24
A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved 描述處理有害及無害廢棄物的方法、減低產生量的措施及所得成果	P24

	Indicator for Disclosure 環境、社會及管治指標	Page 披露計劃與説明
A2: Use of 資源使		
Policies on th	General Disclosure Policies on the efficient use of resources, including energy, water, and other raw materials.	
一般披露: 有效使用資源	京(包括能源、水及其他原材料)的政策	
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility). 按類型劃分的直接及/或間接能源(如電、氣或油)總耗量(以每千秒千瓦時計算)及密度(如以每產量單位、每項設施計算)	P25
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility) 總耗水量及密度(如以每產量單位、每項設施計算)	P27
A2.3	Description of energy use efficiency initiatives and results achieved. 描述能源使用效益計劃及所得成果	P26
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved. 描述求取適用水源上可有任何問題,以及提升用水效益計劃及所得成果	P27
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced. 製成品所用包裝材料的總量(以噸計算)及(如適用)每生產單位佔量	Not Applicable 不適用
General Disc		
Policies on minimising the issuer's significant impact on the environment and natural resources. 一般披露:減低發行人對環境及天然資源造成重大影響的政策		
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them. 描述業務活動對環境及天然資源的重大影響及已採取管理有關影響的行動	P22

	Indicator for Disclosure 環境、社會及管治指標	Page 披露計劃與説明
Scope:	Social 社會	
	ment and Labour Practices ^岑 工常規	
	nployment 傭	P39
Informa (a) th (b) co re p 一般披 有關薪 的: (a) 四	Disclosure tion on: e policies; and impliance with relevant laws and regulations that have a significant impact on the issuer lating to compensation and dismissal, recruitment, and promotion, working hours, resteriods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. I HOME NATIONAL THE NATION	
B1.1	Total workforce by gender, employment type, age group and geographical region 按僱傭類型、年齡組別及地區劃分的僱員總數	P40
B1.2	Employee turnover rate by gender, age group and geographical region 按年齡組別及地區劃分的僱員流失比率	P40
	B2: Health and Safety 健康與安全	
Informa (a) P (b) C re o 一般披	Disclosure tion on: blicies; and ompliance with relevant laws and regulations that have a significant impact on the issuer lated to providing a safe working environment and protecting employees from ecupational hazards. 家:有關提供安全工作環境及保障僱員避免職業性危害的: 策:及	
(b) 選 B2.1	守對發行人有重大影響的相關法律及規例的資料 Number and rate of work-related fatalities. 因工作關係而死亡的人數及比率	P17
B2.2	Lost days due to work injury. 因工傷損失工作日數	P17
B2.3	Description of occupational health and safety measures adopted, how they have been implemented and monitored. 描述所採納的職業健康與安全措施,以及相關執行及監察方法	P16–19

	Indicator for Disclosure 環境、社會及管治指標	Page 披露計劃與説明
B3: Develo 發展與	pment and Training 培訓	P42
Policies on ir	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	
一般披露: 有關提升僱員	是 履行工作職責的知識及技能的政策。描述培訓活動	
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management). 按僱員類別(如高級管理層、中級管理層等)劃分的受訓僱員百分比	P44
B3.2	The average training hours completed per employee by gender and employee category. 按僱員類別劃分,每名僱員完成受訓的平均時數	P41
B4: Labour 勞工準	Standards 則	P39
General Disclosure Information on: (a) Policies; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer related to preventing child and forced labour.		
一般披露: 有關防止童工 (a) 政策; (b) 遵守對		
B4.1	Description of measures to review employment practices to avoid child and forced labour. 描述檢討招聘慣例的措施以避免童工及強制勞工	P39
B4.2	Description of steps taken to eliminate such practices when discovered. 描述在發現違規情況時消除有關情況所採取的步驟	P39

Indicator for Disclosure 環境、社會及管治指標	Page 披露計劃與説明	
Operating Practices 運營慣例		
B5: Supply Chain Management 供應鏈管理	P30	
General Disclosure Policies on managing environmental and social risks of the supply chain.		
一般披露:管理供應鏈的環境及社會風險政策		
B5.1 Number of suppliers by geographical region 按地區劃分的供貨商數目	P31	
B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored. 描述有關聘用供貨商的慣例,向其執行有關慣例的供貨商數目、以及有關慣例	P30	
B6: Product Responsibility 產品責任 General Disclosure Information on: (a) Policies; and (b) Compliance with relevant laws and regulations that have a significant impact on the issuer related to health and safety, advertising, labelling, and privacy matters relating to products and services provided and methods of redress. —般披露:有關所提供產品和服務的健康與安全、廣告、標簽及私隱事宜以及補救方法的: (a) 政策;及 (b) 遵守對發行人有重大影響的相關法律及規例的資料 B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons. 已售或已運送產品總數中因安全與健康理由而回收的百分比 B6.2 Number of products and service related complaints received and how they were dealt with.	P29–30 Not Applicable 不適用 P30	
接獲關於產品及服務的投訴數目以及應對方法 B6.3 Description of practices relating to observing and protecting intellectual property rights.	Not Applicable	
描述與維護及保障知識產權有關的慣例	不適用	
B6.4 Description of quality assurance processes and recall procedures. 描述質量檢定過程及產品回收程序	P29	
B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored. 描述消費者資料保障及私隱政策,以及相關執行及監察方法	Not Applicable 不適用	

	Indicator for Disclosure 環境、社會及管治指標	Page 披露計劃與説明
B7: Anti-co 反貪污	rruption	P10
General Disc Information of (a) Policies (b) Complicated 一般披露:有 (a) 政策:	on: s; and iance with relevant laws and regulations that have a significant impact on the issuer to bribery, extortion, fraud, and money laundering. i關防止賄賂、勒索、欺詐及洗黑的:	
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases. 於彙報期內對發行人或其僱員提出並已審結的貪污訴訟案件的數目及訴訟結果	P10
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored. 描述防範措施及舉報程序,以及相關執行及監察方法	P10
Community 社區		
B8: Commi 社區投	unity Investment 資	P32–38
General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests. 一般披露:有關以社區參與來瞭解營運所在社區需要和確保其業務活動會考慮社區利益的政策		
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport). 專注貢獻範疇(如教育、環境事宜、勞工需求、健康、文化、體育)	P32–38
B8.2	Resources contributed (e.g. money or time) to the focus area. 在專注範疇所動用資源(如金錢或時間)	P32–38

Feedback 讀者意見反饋表

Dear Reader:

Thank you for your interest and support in AAG's sustainable development commitments. In order to deliver professional and valuable ESG information to you, as well as further improve our Sustainable Development Report, your suggestions and feedback are very much appreciated.

- 1. Are you satisfied with this report? Please feel free to share your comments.
- 1. Does this report give you full visibility on our CSR platform?
- 2. Were you able to find the information that you were seeking in this report?
- 3. What are your suggestions for this report?

尊敬的讀者:

非常感謝您對亞美能源控股有限公司可持續發展的關注和支持,為向您提供我們更專業、更有價值的環境、社會及管治信息,進一步提升亞美能源可持續發展報告的質量,歡迎您回答意見反饋表中的相關問題。

- 1. 您對報告是否滿意?請作出您的評價。
- 2. 您認為我們履行企業社會責任的情況是 否得到了完整披露?
- 3. 您希望瞭解的信息在報告中是否被完整 披露?
- 4. 您對報告有哪些改進建議?

Your contact information 您的信息:
Name 姓名
Company 工作單位
Title 職務
Fax 傳真
Phone Number 聯繫電話
E-mail 電子郵件



AAG Energy Holdings Limited 亞美能源控股有限公司

