

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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About This Report

關於本報告

This report is a true reflection of AAG Energy Holdings Limited's ("AAG Energy" or "the Company") active fulfillment of its economic, social and environmental responsibilities to achieve comprehensive, coordinated and sustainable development. The forward-looking statements with respect to business plans and development strategies in the report do not constitute a substantial commitment of the Company to investors.

本報告是亞美能源控股有限公司(「**亞美能源**」或「本公司」)積極履行經濟、社會和環境責任,實現全面協調可持續發展的真實反映。報告中所涉及的經營計劃、發展戰略等前瞻性描述不構成公司對投資者的實質承諾。

Time Period

This report covers data from 1 January 2019 to 31 December 2019 with some contents out of this time range.

• Scope of the Report

This report includes AAG Energy and all its subsidiaries.

Data Specifications

All data was mainly sourced from official documents, statistical and financial reports of the Company, as well as the environmental, social and governance ("**ESG**") 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 in the report is Chinese Yuan ("**CNY**").

References

This report was prepared based on the "ESG Reporting Guide" on appendix 27 of the Guidelines For Listing Rules of The Stock Exchange of Hong Kong Limited ("**Stock Exchange**"). It also referred the Sustainability Reporting Guidelines (G4.0) issued by the Global Reporting Initiative ("**GRI**").

• Reporting Specifications

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

Access to the Report

You can browse this report and dynamic information about sustainable development activities of the Company from "Sustainable Development" Section on the homepage of AAG Energy website (http://www.aagenergy.com/zh-CN/). This report is also published on the website of the Stock Exchange (https://www.hkexnews.hk/).

時間範圍

本報告內容時間界限為2019年1月1日 至12月31日,部分內容超出上述範圍。

• 報告範圍

本報告覆蓋亞美能源控股有限公司及所 有附屬公司。

• 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、彙總與審核的環境、社會及管治(「ESG」)信息。報告發布中、英文版本,如有內容不一致,請以中文版為準。如無特殊説明,本報告中貨幣單位均為人民幣「元」。

• 編制依據

本報告參照香港聯合交易所(「**聯交所**」) 《上市規則指引》附錄二十七 一「環境、 社會及管治報告指引」要求,並參考全 球報告倡議組織(「**GRI**」)發布的《可持續 發展報告標準》(G4.0)。

• 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」、「本公司」或「我們」。

● 報告獲取

您可以在亞美能源網站主頁(http://www.aagenergy.com/zh-CN/)的「可持續發展」欄目瀏覽本報告及本公司有關可持續發展活動的動態信息。本報告亦刊載於聯交所網站(https://www.hkexnews.hk/)。

Statement from the Chairman 主席致辭

2019 is the first full year of AAG Energy following the completion of its internal substantial reform. The Company achieved record-breaking success once again with rapid development in all tasks. During this period, AAG Energy delivered a smooth transition in board changes and management adjustments and continued to improve its operating performance by virtue of its consistently excellent operating capabilities, sufficient technical reserves and a strong executive team. In 2019, the coalbed methane ("CBM") gross production of the Company increased by 16.07% to 931 million cubic meters (32.8 billion cubic feet) compared with 2018.

2019年是亞美能源完成內部重大變革後的第一個完整年度,公司再創歷史佳績,各項工作取得飛躍發展。在此期間,亞美能源憑藉一貫優秀的運營能力、充分的技術儲備以及超強執行力的團隊,實現了董事會變動及管理層調整的平穩過渡,經營業績持續提升。2019年亞美能源煤層氣總產量相比2018年增長了16.07%達到9.31億立方米(即328億立方英尺)。

At present, a new round of energy revolution is profoundly changing the world energy landscape. Clean and sustainable energy has become the general trend of the energy sector in the future and the demands of the international community for new global energy governance is likely to rise. How to better secure energy supply, support economic development and protect the environment will be major issues faced by every enterprise. AAG Energy is committed to providing stable, economic, clean and safe energy, while striving to harmonize with society and the environment, to create long-term stable corporate value.

當前,新一輪能源革命正在深刻改變着世界能源格局。清潔、可持續成為未來能源的大勢所趨,國際社會對新一輪全球能源治理的需求有可能上升。如何更好地保障能源供應、強力支持經濟發展并保護環境將是每個企業面臨的重大課題。亞美能源致力於提供穩定、經濟、清潔與安全的能源,亦努力與社會和環境和諧相融,創造長期穩定的企業價值。

AAG Energy actively responds to the policies and requirements of the central and local governments. In 2019, the country further encouraged natural gas production and market reforms, which has contributed to AAG Energy's ongoing growth as a domestic leading CBM producer with historical new highs in production and sales. We are also confident of continuing to control costs and improve profit margins, so as to provide clean energy to society while bringing more returns to shareholders and other stakeholders.

亞美能源積極響應中央和當地政府各項政策與要求。2019年國家進一步鼓勵天然氣生產和市場改革,這助力亞美能源作為國內領先的煤層氣生產商業績繼續增長,在產量和銷量上達到歷史新高。我們也有信心繼續控制成本和提高利潤率,在為社會提供清潔能源的同時給股東及其他利益相關方帶來更高的回報。

As a leading CBM exploration and development enterprise in China, we always put the health, safety and environment ("HSE") works at the forefront. With the joint efforts of all employees, AAG Energy made outstanding HSE performance indicators in 2019. Specifically, the Company maintained a remarkable safety performance with zero record on total recordable accident rate ("TRIR"), lost time injury rate ("LTIR"), and preventable motor vehicle accidents ("PMVA") in 2019. As of 31 December 2019, AAG Energy had achieved excellent safety performance with zero LTIR for 5 years and 117 days in a row.

作為國內領先的煤層氣勘探開發企業,我們始終將健康、安全、環保(「HSE」)工作放在首要位置。在全體員工的共同努力下,2019年亞美能源在HSE績效指標方面取得卓越表現。具體而言,2019年本公司繼續保持員工總可記錄事故率(「TRIR」)、損失工時事故率(「LTIR」)和可預防性交通事故(「PMVA」)均為零的出色安全業績。截至2019年12月31日,亞美能源取得了累計5年零117天無損失工時事故的優秀安全業績。

Statement from the Chairman 主席致辭

AAG Energy always adheres to the concept of "People-oriented, Excellence-pursuing", committed to cultivating comprehensive talents in management and technology and enhancing the personal value of employees through culture propaganda, system improvement, and professional training. By building a broad career development platform and providing a good working environment, in addition to the industry-competitive compensation and benefits, comprehensive career development training and a variety of leisure venues for employees, the Company enable employees to realize their dreams at AAG Energy.

亞美能源始終堅持「以人為本、追求卓越」的理念,矢志培養管理和技術方面的複合型人才,以文化宣傳、制度建設、業務培訓等工作提升員工個人價值。本公司透過為員工搭建廣闊的職業發展平台,提供良好的工作環境、富有行業競爭力的薪酬福利、全方位的職業發展培訓和豐富多彩的業餘生活空間,使員工能夠在亞美能源實現自己的夢想。

AAG Energy actively fulfilled its community responsibilities by boosting local employment and giving priority to selecting local contractors and suppliers to foster and support them to grow together. At the same time, we actively participated in charitable activities, such as donating for poverty alleviation, organizing participation in various community services and volunteer activities to contribute to the prosperity, vitality, inclusiveness and mutual assistance of the community.

亞美能源積極履行社區責任,帶動當地就業, 優先選用當地承包商和供應商,培養並扶持其 發展。同時,我們積極投身公益,捐資扶貧, 組織參與各類社區服務與志願活動,為實現環 境優美、繁榮活力、包容互助的社區貢獻力 量。

Looking forward to the future, AAG Energy will follow the trend of global energy industry reform and add new impetus to the energy industry chain, continuously improve its industrial status and international competitiveness to promote the healthy and sustainable development of its energy operations. The Company will continue to fulfill its commitment to sustainable development for providing "green" guarantees for the country's economic development, and creating greater value for the environment, society, employees and shareholders.

展望未來,亞美能源將順應世界能源產業變革趨勢,為能源產業鏈添加新動力,不斷提升產業地位和國際競爭力,推動能源業務健康和持續發展。本公司也將繼續履行可持續發展承諾,為國家經濟發展提供「綠色」保障,為環境、社會、員工及股東創造更大的價值。

1. About Us 關於我們

AAG Energy is an international energy company with a leading position in the exploration and development of CBM in China. It is committed to the developing and value optimizing of unconventional gas resources to supply clean energy to the Chinese economy. AAG Energy is well aware that enterprises shoulder corresponding social and environmental responsibilities while ensuring returns to shareholders. The Company always devotes efforts to actively responding to the challenges faced by the entire society, energy sector and the environment, and providing residents and industrial users with clean energy through CBM development to make due contributions to China's economic development.

亞美能源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,致力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。亞美能源深知,企業在確保股東回報的同時還肩負着相應的社會和環保責任。本公司始終致力於積極應對整個社會、能源和環境所面對的挑戰,通過煤層氣開發為用戶和工業用戶提供清潔能源,為中國經濟的發展做出應有的貢獻。

AAG Energy's key operating assets, the Panzhuang and Mabi concessions, are located in the southwestern part of the Qinshui Basin, Shanxi Province, which boasts the largest proven CBM geological reserves among basins in China. AAG Energy's Panzhuang concession, which is in partnership with China United Coalbed Methane Corporation Ltd. ("CUCBM") is the first Sino-foreign cooperative CBM project with full-scale commercial development and production, also the most commercially advanced Sino-foreign cooperative CBM asset in China. The project has a designed production up to 650 million cubic meters. The southern area in Mabi concession which is in partnership with China National Petroleum Corporation ("CNPC") has a designed annual production capacity of 1 billion cubic meters for commercial development.

亞美能源的主要運營資產潘莊及馬必區塊位於山西省的沁水盆地西南部,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有限責任公司(「中聯煤」)合作的潘莊區塊是中國首個進入全面商業開發和生產的中外合作煤層氣資產,項目設計最高年產量達6.5億立方米。亞美能源與中國石油天然氣集團有限公司(「中國石油」)合作的馬必區塊的南區商業開發年設計產能為10億立方米。

According to reports issued by Netherland Sewell & Associates Inc. ("NSAI"), an independent reserve certification company, AAG Energy's net 2P natural gas reserve as at the end of 2019 was approximately 18.536 billion cubic meters, equivalent to that at the end of 2018 or a 4% increase after the deduction of net gas production for 2019. Panzhuang concession contributed a net 2P reserve of 5.559 billion cubic meters, a 6% decrease from that at the end of 2018 or a 6% increase after the deduction of net gas production in 2019. Mabi concession contributed a net 2P reserve of 12.978 billion cubic meters, a 2% increase from that at the end of 2018 or a 3% increase after the deduction of net gas production in 2019.

根據獨立儲量認證公司Netherland Sewell & Associates Inc.(「NSAI」)發佈的報告,截至2019年底亞美能源淨2P天然氣儲量約為185.36億立方米,與2018年底淨2P儲量相當,扣除2019年淨產氣量之後,淨2P儲量增長了4%。潘莊區塊貢獻的淨2P儲量為55.59億立方米,較2018年底的淨2P儲量下降了6%,扣除2019年淨產氣量之後,淨2P儲量增長了6%;馬必區塊貢獻的淨2P儲量為129.78億立方米,較2018年底的淨2P儲量增長了2%,扣除2019年淨產氣量之後,淨2P儲量增長了3%。

AAG Energy always adheres to the core values of sustainable development by actively improving the sustainable development management system, integrating the requirements of sustainable development into the Company's daily management, and embedding the awareness of sustainable development into the corporate culture. At the same time, we proactively understand the expectations and demands of stakeholders identify sustainable development issues that are closely related to the Company, and commit ourselves to common sustainable development with various parties.

亞美能源始終堅守可持續發展的核心價值理 念,積極完善可持續發展管理體系,將可持續 發展要求融入到公司日常管理中,將可持續發 展意識滲透到企業文化中。同時,我們主動了 解利益相關方的期望與訴求,識別與自身息息 相關的可持續發展議題,致力於實現多方共同 可持續發展。

2.1 ESG Management

The board of directors of AAG Energy ("Board") attaches great importance to the management of sustainable development, recognizing and assuming all the responsibilities of ESG strategy and reporting. In 2019, AAG Energy further improved the ESG governance system and established an ESG Working Group under the Board. The Working Group consists of five members, including an independent non-executive director, an executive director, a senior management member, the head of the Department of Health, Safety and Environmental Protection ("HSE") and a board office staff. Among them, independent nonexecutive director Mr. Yang Ruizhao serves as the head of the Working Group, responsible for the overall guidance of ESG, executive director Mr. Yan Danhua is responsible for the overall work of ESG, and Mr. Wang Zilong, head of the Department of HSE and Mrs. Ren Agin from board office serves as secretary of the Working Group responsible for preparing and keeping complete attendance records and minutes of the Working Group meetings.

The main responsibilities of the Working Group include the following:

- (a) Reviewing and guiding ESG related policies, regulations, standards and trends, assessing the external and internal influence from ESG work, determining the materiality for ESG related issues of the Company, making the Company's ESG strategies and forming annual working goals and plans;
- (b) Supervising and monitoring the implementation of the Company's ESG strategies, breaking down annual goals and plans, reviewing the progress of ESG goals and implementing quarterly review.

2.1 ESG 管理

工作組主要職責包括以下方面:

- (a) 檢視ESG相關的政策、法規、標準 及趨勢,評估ESG工作對內外部的 影響,判定公司ESG事宜的重大 性,制定公司ESG戰略,及形成年 度工作目標與計劃;
- (b) 監察企業對ESG戰略的執行情況, 分解年度目標與計劃,檢討ESG目 標達成的進度,實施季度考核;

- (c) Supervising and monitoring the operation system of the Company's ESG management to ensure its continued effectiveness and compliance with applicable laws and regulations;
- (d) Reviewing and approving the Company's annual ESG report;
- (e) Other matters that the Working Group considers relevant to ESG management or other matters authorized by the Board.

The establishment of the Working Group does not reduce the responsibilities of the Board. All material matters considered and discussed by the Working Group and the opinions or suggestions formed thereof shall be submitted in the form of reports or motions to the Board for research and decision-making, and the resolutions or opinions of the Board shall be followed and implemented.

Pursuant to the spirits and resolutions of the meetings by the Board and the Working Group, Mr. Yan Danhua, member of the Working Group and executive director, is responsible for organizing the implementation of ESG visions, goals and strategies, establishing the operating system, approving action plans, and reviewing the ESG report; Mr. Wang Bing, member of the Working Group and senior management member, is responsible for the effective implementation of the operating system, reviewing and promoting the implementation of the ESG action plans, organizing ESG report review team, and reviewing the ESG report; Mr. Wang Zilong, member of the Working Group and head of the Department of HSE, is responsible for organizing the preparation of the ESG action plans, collecting and collating the materials required for ESG reporting, entrusting the preparation and preliminary review of the ESG report, and assisting the ESG reporting by the Working Group and the Board. The office of the Board is responsible for assisting the format review of the ESG report and organizing and coordinating the disclosure of the ESG report.

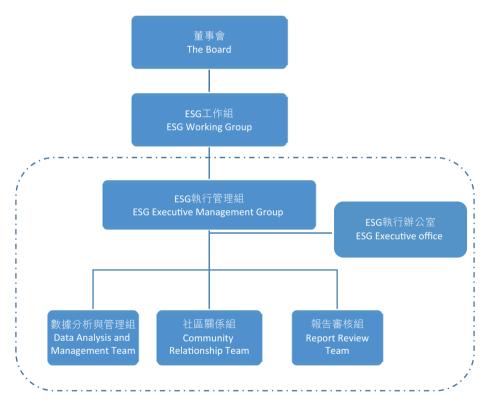
- (c) 監察公司ESG運行體系,以確保其 持續有效,並符合適用法例及規則 之要求;
- (d) 審閱及核定公司年度環境、社會及 管治報告;
- (e) 工作組認為與ESG有關的其他事宜 或董事會授權的其他事宜。

工作組的成立並不減輕董事會的責任, 工作組審議、討論的所有重大事項及形 成的意見或建議應以報告或議案的形式 提交董事會研究、決策,並遵照執行董 事會的決議或意見。

In order to comprehensively implement the ESG work arrangement from the ESG working group of the Board, to make fully compliance to the latest "ESG Reporting Guide" from Stock Exchange, and to disclose annual ESG report as scheduled, AAG Energy set up an ESG Execution Group on site consisting of four teams, which are ESG Executive Management Team, Data Analysis and Management Team, Community Relationship Team and Report Review Team. Under ESG Executive Management Group, there is an ESG Executive Office belonging to the Department of HSE, which performs the daily management over the executive office and is responsible for coordination, organization and management of ESG work.

為全面貫徹董事會ESG工作組對ESG工作安排部署,認真履行聯交所最新ESG指引諮詢總結的ESG工作指南,並如期披露年度ESG報告,亞美能源在業務現場成立ESG執行組,執行組由四個管理小組、執行管理小組、數據分析與智管,與人類不可以,是SG執行管理組在公司安全環保部下設執行辦公室,由安全環保部進行日常管理並負責ESG工作的協調、組織、管理等工作。

備註:虛線框圖所示即為ESG執行組



The Structure of AAG Energy ESG Working Group 亞美能源 ESG 工作組織架構圖

Note: the ESG Executive Group is as shown in the dash line area

In December 2019, Mr. Yan Danhua, member of the Working Group and executive director, presided over the 2019 AAG Energy Sustainable Development Work Conference, and organized personnel interviews, stakeholders research and communication and information and materials collection. At the beginning of 2020, the directors of the Company reviewed the ESG reporting framework. A Motion on the 2019 AAG Energy Sustainable Development Report was revised at the annual board meeting of AAG Energy held on March 27, 2020 and the directors present at carefully reviewed the report and put forward amendments and advice.

The establishment of the ESG Working Group and its operating system allow us to coordinate and track the daily ESG work in a more planned manner to ensure that each task is carried out orderly. On the way to achieving sustainable development, AAG Energy pledges:

- We adopt fair labor practices at our workplaces and will abide by all relevant laws and industry standards.
- We prevent any work-related injuries, fatalities or health impairments to employees and contractors.
- We will maintain transparent and trustworthy relationships with all shareholders and communicate issues of common concern to enhance mutual understanding.
- We will strive to run our operations in social responsible, sustainable and environmental manners, thereby minimizing adverse impacts caused by production.
- We are committed to helping all employees unleash their full potential to gain satisfaction from work and make their greatest contribution to the Company.

2019年12月,工作組成員及執行董事嚴 丹華先生主持召開亞美能源2019年度可 持續發展工作會議,組織開展人員訪 談、利益相關方調研與溝通、信息與討 對收集等各項工作。2020年初,公司董 事對ESG報告框架進行了審訂。2020年 3月27日召開的亞美能源控股有限公司 年度董事會議審議了《關於亞美能源2019 年度可持續發展報告的議案》,各位參會 董事認真審閱報告並提出了修改意見和 建議。

ESG工作組的成立及其運行體系的建立 使我們更有計劃地配合與跟蹤日常ESG 工作,確保各項工作有序進行。在實現 可持續發展的路上,亞美能源承諾:

- 我們在工作場所採用公平的行為準則並遵守所有相關的法律和工業標準。
- 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。
- 我們致力於幫助所有員工發揮其最 大潛能,從工作中獲得滿足感,最 大程度的為公司做出貢獻。

2.2 Stakeholders Engagement

While expanding its business operations, AAG Energy is committed to enhancing its long-term value to protect the interests of all stakeholders. The Company attaches importance to communications with stakeholders, respects and actively collect their feedback to understand the improvement needed for operation plans and priorities therefrom and take actions accordingly. AAG Energy communicates with stakeholders through various channels and invite them to give valuable feedback. The following table shows the communication channels we use, the main concerns and expectations of stakeholders, and the measures taken by the Company regarding to relevant opinions.

2.2 利益相關方參與

Stakeholders 利益相關方	Expectations and Demands 期望與要求	Communication Channel 溝通方式
Governments and	Complying with national laws and regulations	Reporting and filing
Regulators	Promoting local economic development	Provide suggestions
	Boosting local employment	Provide special report
	Promoting industry development	Discuss cooperation
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	專題匯報
	推動行業發展	洽談合作
Shareholders	Return of investment	Company announcements
	Operation with compliance	Special report
	Production safety	Site visit
股東	收益回報	公司公告
	合規運營	專題匯報
	安全生產	實地考察
Customers and Partners	Fulfil contracts	Business communication
	Operations with integrity	Customer feedback
	Deliver high quality products and services	Communication and discussion
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 reduction	Statement submission
	Ecological protection	Investigation and inspection
環境	合規排放 合規排放	工作匯報
	節能減排	報表報送
	保護生態	調研檢查

2. Sustainable Development Management

可持續發展管理

Stakeholders 利益相關方	Expectations and Demands 期望與要求	Communication Channel 溝通方式
Employees	Rights and interests of employees Occupational health Compensation and benefits Career development 員工權益 職業健康 薪酬福利 職業發展	Staff informal meeting Collective negotiation Democratic communication platform 員工座談會 集體協商 民主溝通平台
Communities and Public 社區及公眾	Improvement of community environment Public welfare undertakings Open and transparent information 改善社區環境 參與公益事業 信息公開透明	Official website Company announcements Interview and communication 公司官方網站 公司公告 採訪交流

2.3 Response to ESG Reporting Principles

Materiality: In order to clarify the key areas of ESG practice and information disclosure and improve the relevance of the report, AAG Energy identified ESG issues and made materiality judgments in accordance with the requirements of the ESG Reporting Guide of the Stock Exchange to ensure that the information disclosed in the report comprehensively covers key issues of concern to the Company and stakeholders.

AAG Energy invited internal and external stakeholders to participate in the identification and assessment of material topics which are relevant and important to stakeholders. Through staff interviews, site survey, questionnaires and other manners, we fully understand the sustainability topics that internal staff and external stakeholders concern In 2019, 233 valid responses were received based on the questionnaire survey on material issues for sustainable development of AAG Energy.

2.3 ESG報告原則回應

重要性原則:為明確ESG實踐及信息披露的重點領域,提升報告針對性,亞美能源依據香港聯合交易所《環境、社會及管治報告指引》要求,識別ESG議題並進行重大性判定,確保報告披露信息全面覆蓋亞美能源及利益相關方關注的重點議題。

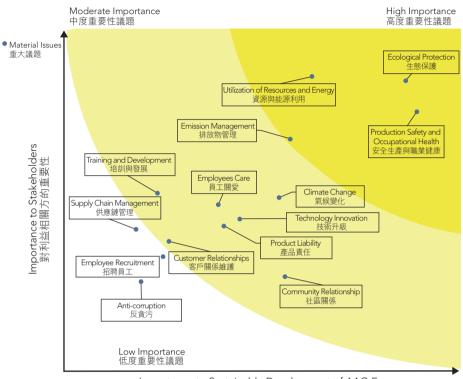
亞美能源邀請公司內部和外部各利益相關方參與識別ESG議題並進行重要性評估。通過員工訪談、現場走訪、問卷調查等多種形式,充分理解內部員工和外部利益相關方關注的可持續發展議題。2019年,亞美能源可持續發展重大議題問卷調查共收到233份有效回應。

Steps to Identify Material Environmental, Social and Governance Issues 環境、社會及管治議題篩選流程



- Corporate management suggestions
- Suggestions from internal and external experts
- Multimedia information analysis
- International industry benchmarking studies
- ESG standards and guidelines
- 公司管理層建議
- 內外部專家分析建議
- 多媒體信息分析
- 同業對標研究
- ESG相關標準、指南
- Contribution to sustainable development
- Concerns of stakeholders
- Principles of Materiality in ESG guidelines
- The needs of our corporate strategic development
- 對可持續發展的貢獻
- 利益相關方普遍關注
- ESG相關指南重要議題準則
- 符合公司戰略發展需要

Materiality Matrix of AAG Energy in 2019 亞美能源 2019 年可持續發展重大議題矩陣



Importance to Sustainable Development of AAG Energy 對亞美能源可持續發展的重要性

Quantitative: AAG Energy established standardized ESG indicator management tools covering the headquarters, Panzhuang and Mabi projects to conduct regular statistics on quantitative key disclosure indicators involving the "environment" scope in whole and the scope of "society" in part from the ESG Reporting Guide. Statistical data was summarized during the year and finally form this report for disclosure. ESG quantitative data is detailed in sections of this report.

Consistency: This report made no major adjustments to the scope of disclosure compared with the ESG reports for previous years, and adopted consistent statistical and disclosure methods and further refined some categories of disclosure corresponding to the ESG Reporting Guide. The year-on-year ESG comparative data is detailed in sections of this report.

量化原則:亞美能源建立了覆蓋總部、 潘莊項目及馬必項目的標準化ESG指標 管理工具,對包括ESG報告指引中所有 「環境」範疇及部分「社會」範疇的量化關 鍵披露指標進行定期統計。統計數據於 年內進行匯總,最終形成本報告對外披 露。ESG量化數據詳見本報告各章節。

一致性原則:本報告相較往年ESG報告披露範圍並無重大調整,且使用一致的披露統計方法,並進一步細化部分聯交所ESG報告指引對應披露類別。ESG多年對比數據詳見本報告各章節。

AAG Energy always places high emphasis on safe production and pursues green and clean operations. It has firmly established the concept of safe development, striving to create a safe production model, while strengthening environmental protection with focus on reducing the impact on the ecological environment, so that corporate safety and environmental protection advance side by side with green development.

亞美能源始終重視安全生產,奉行綠色清潔運營,牢固樹立安全發展理念,全力打造安全生產格局,加大環保力度,全力降低生態環境影響,使得企業安全環保與綠色發展齊頭並進。

In 2019, AAG Energy achieved a remarkable safety and environmental performance with zero record on TRIR, LTIR and PMVA, as well as zero environment pollution accident ("**EPA**") rate, thus effectively fulfilled its operational commitments to safety and environmental protection.

2019年,亞美能源完成零損工傷亡、零可記錄 事故、零責任交通事故以及零環境污染事故的 安全環保成績,切實踐行了安全環保運營承 諾。

3.1 Continuous Safe Operation

Taking safe operation as the primary responsibility, AAG Energy vigorously promotes the standardization of safety production, and systematically manages HSE in daily business operations to fulfill safe operation.

Safety Management

AAG Energy adheres to the principle of "safety is the top priority" and the safety management concept of "accidents are preventable". The Company pursues the safety and environmental protection goals of "zero pollution, zero accident and zero injury", commits itself to workplace safety, and is highly responsible for the safety of employees. As of 31 December 2019, AAG Energy had achieved excellent safety performance with zero LTIR for 5 years and 117 days in a row.

AAG Energy strictly abides by the laws and regulations such as the Production Safety Law of the People's Republic of China, the Environmental Protection Law of People's Republic of China and Safety Regulations for CBM Exploitation (trial edition) by establishing an effective HSE management system, signing and implementing the Compilation of HSE Management Systems (《HSE管理制度彙編》), Compilation of Management Systems for Production Operation Department (《生產運行部管理制度彙編》), Compilation of Management Systems for Drilling Supervision Department (《鑽井監管部管理制度彙編》), Compilation of Management Systems for Engineering Construction Department (《工程建設部管理制 度彙編》), and Compilation of Management Systems for Comprehensive Support Department (《綜合保障部管理制度彙編》). The Company sets clear HSE indicators for each department, and moves forward implementation at all levels to ensure the realization of HSE targets.

3.1 持續安全運營

亞美能源以安全運營為首任,大力推行 安全生產標準化建設,在日常業務運行 中進行HSE系統化管理,貫徹落實安全 運營。

安全管理

亞美能源堅持「安全是第一要務」的原則和「事故都可預防」的安全管理理念,公司追求無污染、無事故和無傷害的安全環保目標,承諾作業場所安全,並對員工安全高度負責。截至2019年12月31日,亞美能源實現了累計5年零117天無損失工時事故的安全業績。

亞美能源嚴格遵守《中華人民共和國安全生產法》、《中華人民共和國環境保護法》、《煤層氣地面開採安全規程(試行)》等法律法規,建立完善的HSE管理體系,完成並簽署實施《HSE管理制度彙編》、《生產運行部管理制度彙編》、《工程建設部管理制度彙編》和《綜合保障部管理制度彙編》等制度,公司為各部門設定明確的HSE指標,推動層層落實,保證HSE目標的實現。

The Company President, Vice President of Production Operations, and Management Team establish AAG Energy annual HSE targets

公司總裁、生產運營副總裁及管理團隊設立亞美能源年度HSE目標

The Company quantifies annual HSE targets, clarifies HSE responsibilities of management personnel at all levels, and signs HSE responsibility-oriented targets letters of with responsible persons

量化年度 HSE 指標,明確各級管理人員 HSE 責任,與責任人簽訂 HSE 責任目標書

The responsible persons assign HSE targets to relevant employees for implementation 責任人將 HSE 指標分配落實至相關員工

The managers at each level evaluate the HSE performance of employees every year 各級管理人員每年對其員工 HSE 績效進行評定

HSE performance are included in employee performance assessment HSE 績效納入員工績效考核

AAG Energy HSE Targets Establishment and Implementation Process 亞美能源 HSE 指標建立與落實流程

In 2019, due to large drilling tasks and a number of new drilling teams being introduced, AAG Energy carried out semi-annual audits of drilling contractors, safety management appraisal activities, and education on safety and environmental protection in view of the drilling safety management status to continuously improve the drilling contractors' safety management and assist the contractors in implementing safety management responsibilities. For the on-site safety inspection work, AAG Energy formulated the Rules for Drilling Safety Inspection (《鑽井安全檢查細則》) to implement contractor safety management into every detail. In 2019, AAG Energy implemented a series of safety management measures for drilling contractors, and achieved the safety and environmental protection performance of zero casualties and zero pollution during drilling operations.

2019年,在鑽井任務大、新進鑽井隊伍 多的背景下,亞美能源結合鑽井安全管 理現狀,開展鑽井承包商半年度審計工 作、安全管理評比活動和入場安全環保 教育,不斷促進鑽井承包商自身安全環保 教育,不斷促進鑽井承包商首實安全管 理水平提升,並協助承包商落實安全管 理責任。針對現場安全檢查工作,將至 管理落實到細節。2019年,至 管理落實到細節。2019年,至 能源實施一系列鑽井承包商的安全管理 舉措,實現了鑽井作業零傷亡、 等污染 的安全環保業績。

In 2019, AAG Energy continued to improve the standardization of safety production. Based on the status and needs of production safety, original systems were revised, improved and recompiled to be more conducive to on-site risks management and control, more operable and more in line with actual conditions. These systems include the responsibility system of each department/ post of the project, the project safety and environmental protection management system, the management system and operating procedures of each department, etc. all of which have been released and put into operation.

2019年,亞美能源繼續完善安全生產標準化建設,結合安全生產現狀與需求,對原有制度進行修訂、完善和重新編制,以更加有利於項目現場作業管控風險,更加符合實際、可操作性更高,其中包含項目各部門/各崗位責任制、項目安全環保管理制度、各部門管理制度和操作規程等內容,均已發佈並運行。

In the principle of "comprehensive inspection with emphasis on key points", the HSE department organized 11 types of safety inspections and audits, including traffic safety audits, special audits for special equipment management, and inspections of various high-risk operations, and 981 potential dangers were discovered. By the end of 2019, the rectification completion rate reached 100%.

亞美能源安全環保部門以「全面檢查、 突出重點」為原則,組織開展了包含交 通安全審核、特種設備管理專項審核、 各類高風險作業檢查等11個類別的安全 檢查及審核,累計發現隱患981項,截 至2019年底,隱患整改完成率達100%。

In order to ensure on-site operation safety, the Panzhuang and Mabi projects organize monthly safety inspections, inspections on anti-freezing insulation, fire protection, flood prevention, lightning protection based on seasonal changes along with special and comprehensive safety inspections. At the same time, the Company carries out safety production supervision, inspection and potential risk screening in an all-round and full-process fashion over project construction, maintenance and other production activities. In 2019, the Panzhuang and Mabi projects carried out a total of 888 safety inspections.

為保障現場作業安全,潘莊和馬必項目 定期組織月度安全檢查,根據季節變化 組織防凍保溫、消防、防汛、防雷電檢 查,以及專項和綜合性安全大檢查,同 時對公司項目建設、檢維修等生產活動 進行全方位全過程的安全生產監督檢查 和隱患排查。2019年,潘莊項目與馬必 項目累計開展安全檢查888次。

In 2019, in order to enhance the emergency response capability and the emergency management of the operation team, AAG Energy revised the Emergency Management Procedures (《應急管理程序》), compiled Comprehensive Emergency Response Plan (《綜合應急預案》), and organized emergency drills and first aid knowledge training for emergency rescue personnel. As of the end of 2019, AAG Energy had conducted a total of 37 emergency drills, which effectively tested the applicability and operability of AAG Energy's emergency plan and improved employees' emergency response capabilities.

2019年,為增強作業團隊應急能力與應急管理,亞美能源修訂《應急管理程序》,編制《綜合應急預案》,組織開展應急演練與應急救援人員急救知識培訓。截至2019年底,亞美能源共累計進行應急演練活動37次,有效檢驗了亞美能源應急預案的適用性、可操作性,提高了員工的應急處置能力。

Case: Simulated Blowout Accident Drill in Panzhuang Project

In June 2019, the AAG Energy's Panzhuang project conducted a blowout accident drill which simulated the occurrence of gas overflow during the tub pulling in workover operation. The construction staff immediately determined the possibility of a blowout and activated the on-site blowout treatment plan. The field supervisor reported the situation to the operation supervisor, requested support at the same time. Subsequently the production manager and HSE manager rushed to the accident site upon notification, directed the accident handling on the spot, while calling the part-time emergency rescue team for support and making emergency arrangements.

Through the blowout accident drill, AAG Energy discovered defects in its emergency response work in a timely manner, carried out corresponding rectifications and system improvements, and summarized and assessed personnel performance, which effectively strengthened the emergency response capacity of the Company.

案例:潘莊項目意外井噴事故模擬演練

2019年6月,亞美能源潘莊項目進行了意外井噴事故模擬演練,演練模擬修井作業起油管過程中出現氣體溢出的現象,施工人員隨即判斷有井噴可能性性,並立即啟動井噴現場處置方案。現場管理場處置方案。生產經理、HSE經理報,請求支援。生產經理、HSE經理知期前往事故現場,指揮事故處理,通處置安排。

通過井噴事故演練,亞美能源及時發現應急工作中的不足,進行了相應整改與制度完善,對人員表現進行總結反饋,有力提升了公司對突發事故的應變能力。





Simulated Blowout Accident Drill Site in Panzhuang Project 潘莊項目意外井噴事故模擬演練現場

Safety Culture Build-up

AAG Energy is committed to ensuring the health of employees and the safety of the workplace. At the same time, it requires employees to assume safety responsibilities, organizes education and training on safety in production, and actively carries out safety activities to build a safety culture, improves employees' safety skills, and helps employees to establish safety awareness.

In accordance with the provisions of the Production Safety Law of the People's Republic of China and the Production Safety Training Management Measures (《安全培訓管理辦法》), in conjunction with the Company's safety work deployment, AAG Energy organized such education and training sessions as statutory forensics training, employee on-boarding training, HSE special training, annual employee training, and contractor foreman training, etc. with contents covering national laws and regulations of the oil, gas and CBM industries, safety production skills and safety production management, emergency rescue etc. In 2019, AAG Energy implemented a total of 26,643.5 hours of HSE-related training.

安全文化建設

亞美能源承諾保證員工健康、作業場所 安全,同時要求員工擔當安全責任,對 員工進行安全生產宣傳教育和培訓,積 極開展安全活動,建設安全文化,提升 員工安全技能,幫助員工樹立安全意識。

亞美能源按照《中華人民共和國安全生產法》和《安全培訓管理辦法》規定,結合公司安全生產工作部署,從法定取證培訓、員工入職培訓、HSE專題培訓、從業人員年度培訓和承包商領班培訓等方面組織開展教育培訓工作,內容囊括活油天然氣、煤層氣行業的國家法律及規、安全生產技術、安全生產管理及總數應急救援等。2019年,亞美能源組織實施了HSE相關培訓共計26,643.5學時。





Safety Education and Training Activities 安全教育培訓活動

In 2019, AAG Energy carried out a variety of HSE activities with the themes involving high-risk operations safety, electrical safety, traffic safety, and contractor safety in order to raise employees' attention to HSE, and enhance their HSE knowledge and skills. The Company encourages employees to observe safety behaviors from the aspects of unsafe behaviors of people and unsafe status of articles, calling for participation and intervention of all employees. In 2019, the employees submitted a total of 13,726 behavioral safety observation cards online, which facilitated the discovery and timely handling of safety issues, thereby effectively avoiding production safety accidents. In addition, the Company held weekly toolbox talks, circulated safety knowledge materials, and organized non-scheduled tests and assessments, to create a safety culture and atmosphere while sharing HSE knowledge with employees. AAG Energy actively carried out activities to enhance contractor safety besides protecting the health and safety of employees. Through the onsite HSE management appraisal activities, it effectively enhanced the safety and environmental awareness, knowledge and capabilities of all contractors, and promoted the Company to practice the management philosophy of "win-win cooperation and mutual improvement" with contractors.

2019年,亞美能源組織開展豐富多樣的 HSE活動,活動主題涉及高風險作業安 全、電氣安全、交通安全及承包商安全 等方面,以提高員工對HSE工作的重視, 提升其HSE意識、知識和技能。公司鼓 勵員工從人的不安全行為、物的不安全 狀態方面進行行為安全觀察,號召全員 的參與和干預。2019年,公司員工累計 在線提交13,726張行為安全觀察卡,推 動了安全問題的發現和及時處理,從而 有效地避免了各類生產安全事故發生。 此外,公司開展每週一期的工具箱會 議、安全知識材料發佈和不定期測試考 核,在分享HSE知識的同時,創造良好 的安全文化氛圍。亞美能源在保障員工 健康安全的同時,積極開展承包商安全 活動。通過HSE現場管理評比活動,有 效增強了各承包商的安全環保意識、知 識和能力,推動公司踐行與承包商[合 作共贏,共同提高」的管理思想。

3.2 Creating Clean Environment

As a pioneer in the development and utilization of CBM and a provider of clean energy, AAG Energy strictly abides by national and local environmental laws and regulations, committed to reducing the impact of the production and operation process on environment, protecting the surrounding ecology of its operations, and always placing equal emphasis on business development and environmental protection.

Air Pollutant Emissions Management

AAG Energy strictly adheres to national laws and regulations such as the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on Air Pollution Control, and the CBM (Coal Gas) Emission Standards (interim) (《煤層氣(煤礦瓦斯)排放標準(暫行)》), as well as local air emission standards. The Company has formulated internal environmental management regulations and systems and established a strict environmental protection management network to fully play the leading role of clean energy production.

During the construction period of CBM projects, AAG Energy generates drilling exhaust gas, construction dust, and construction vehicle exhaust. The drilling exhaust mainly comes from the combustion flue gas produced by drilling diesel engines, in which the main pollutants are SO₂, dust, and NO₂. Construction dust is mainly generated from the construction of gas production wells, gas-gathering stations, production dispatching command and management centers, and excavation of linear engineering such as gas gathering pipeline networks and road engineering. Construction vehicles also generate a small amount of pollutants such as SO₂.

Emissions during the operation period of the project mainly come from the use of engineering diesel vehicles, fuel generators and private vehicles, and involve air pollutants such as NO_2 , SO_2 and particulate matter.

3.2 共創綠色環境

亞美能源作為煤層氣開發利用的先行者和清潔能源提供者,嚴格遵守國家及地方環保法律法規,致力於降低生產運營過程對環境產生的影響,保護作業周邊生態,始終將業務發展與環境保護置於同等重要的地位。

大氣污染物管理

亞美能源嚴格遵守《中華人民共和國環境保護法》、《中華人民共和國大氣污染防治法》、《煤層氣(煤礦瓦斯)排放標準(暫行)》等法律法規,以及地區大氣排放標準。公司制定了內部環境管理規章制度,建立起嚴密的環境保護管理網絡,充分發揮清潔能源生產帶頭作用。

亞美能源煤層气項目建設期會產生鑽井廢氣、施工揚塵及施工車輛廢氣等排放,其中鑽井廢氣主要來自鑽井柴油機產生的燃燒煙氣,主要污染物為 SO_2 、煙塵、 NO_2 等;施工揚塵主要產生於採氣井場、集氣站、生產調度指揮管理中心等場站的建設及集氣管網、道路工程等線性工程的開挖;施工車輛會產生少量 SO_2 等污染物。

項目營運期的排放主要來源於工程柴油車、燃油發電機及私家車使用,涉及到NO₂、SO₂、顆粒物等大氣污染物。

In order to reduce air pollution during project construction and production operations, AAG Energy adopts the following measures:

- Using dust protection measures during construction;
- Using low-sulfur fuel for drilling diesel engines as much as possible;
- Using desulfurization equipment such as desulfurization towers, atomization desulfurization devices, and hypergravity machines in gas production to control hydrogen sulfide content;
- Adopting advanced technologies and equipment for CBM gathering and transportation systems to ensure equipment tightness;
- Conducting regular line inspections to ensure that the CBM fugitive leakage is controlled within a reasonable range with the help of the pipeline pressure monitoring and control system;
- Placing flare systems at each gas gathering station and the central gas station, igniting the CBM in the pipeline through flare systems for treatment when pigging operations or discharging due to accident are required so as to reduce direct CBM emissions;
- Using the gas produced by the CBM projects for heating boilers and discharging the flue gas through the chimney higher than 8 m;
- Discharging canteen kitchen oil fume after treatment by purification facilities.

為降低項目建設及生產運營中的大氣污染,亞美能源採取以下措施:

- 施工期使用揚塵防護措施;
- 鑽井柴油機儘量燃用低硫燃料;
- 採氣過程中使用脱硫塔、霧化脱硫、超重立機等脱硫設備,控制硫化氫含量;
- 對煤層氣集輸系統採用先進的工藝和設備,保障設備密閉性;
- 進行定期巡檢,結合管道壓力監測 控制系統,保證煤層氣無組織泄露 控制在合理範圍內;
- 各集氣站和集輸總站設置放空火炬,需要進行清管作業或事故狀態排放時,將管道內煤層氣通過放空火炬點火燃燒處理,減少煤層氣直接排放;
- 供熱鍋爐燃用項目自產的煤層氣, 煙氣通過高於8米的煙囱達標排放;
- 食堂油煙經過淨化設施處理後達標 排放。

Data Sheet of AAG Energy Air Pollutant Emissions in 2019 亞美能源 2019 年大氣污染物數據表

Air Pollutant 大氣污染物	Unit 單位	In 2019 2019年
NO _X	ton	0.18
氮氧化物	噸	
SO ₂ 二氧化硫	ton	0.01
二氧化硫	噸	
PM	ton	0.01
顆粒物	噸	

Water Pollutants Management

AAG Energy's wastewater discharge comes from the construction and operation periods. The wastewater during the construction period mainly includes drilling wastewater, construction wastewater, domestic sewage, etc. During the operation period, industrial wastewater is generated mainly including CBM produced water at the well sites, and industrial waste water and domestic sewage produced at each well site and station. AAG Energy strictly complies with relevant national laws and regulations such as the Water Pollution Control Law of the People's Republic of China for professional treatment.

The drilling mud generated during the project construction period is collected in the mud pond at the well site, and then solidified and landfilled after natural evaporation. The remaining wastewater will be transported and treated by a qualified third-party sewage plant after the construction is completed. Other construction wastewater comes from the water used for concrete mixing, pouring and curing, which is uniformly treated by the temporary sedimentation tank at well site and transported to a treatment plant.

During the operation of the project, AAG Energy standardizes the treatment of industrial wastewater and conducts regular third-party testing. The produced water after precipitation from each well site and station of the project will be regularly delivered to a qualified third-party sewage treatment plant for disposal. The domestic sewage after treatment is used for floor washing and greening.

水污染物管理

亞美能源廢水排放來自施工期與營運期,施工期間廢水主要為鑽井廢水、施工廢水、生活污水等,項目營運期間產生工業廢水,主要包括井場煤層氣採出水、站場工業廢水及生活污水。亞美能源嚴格按照《中華人民共和國水污染防治法》等國家相關法律法規,對生產廢水進行專業的處理。

項目施工期產生的鑽井泥漿集於井場的 泥漿池中,經自然蒸發後進行固化填埋 處理,餘下廢水在施工結束後由處理機 構統一拉運並處理。其他施工廢水來源 於混凝土攪拌、澆注和養護用水,統一 經井場的臨時沉澱池處理後拉運至處理 機構處理。

項目營運期間,亞美能源對工業廢水進行規範處理,並定期進行第三方檢測。項目各個井場和站場的工業廢水定期交由有資質的第三方污水處理廠進行處理。生活污水經處理後用於綠化和清潔。

In 2019, AAG Energy recorded zero EPA.

2019年,亞美能源未發生任何環境污染 事故。

Data Sheet of AAG Energy Wastewater in 2019 亞美能源 2019 年水污染物數據表

Wastewater 水污染物	Unit 單位	In 2019 2019年
Total drilling wastewater	m^3	57.00
鑽井廢水總量	立方米	
Total industrial wastewater discharge	ton	175,283.69
工業廢水排放總量	噸	

Waste Management

During the construction and operation periods of the projects, non-hazardous waste such as drilling mud, drilling cuttings, construction waste, spent desulfurizer, and household waste, as well as hazardous waste such as waste engine oil and waste cotton cloth due to equipment maintenance are generated. AAG Energy strictly abides by the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste and regulates the treatment of all types of waste in order to minimize the environmental impact.

During the drilling process, quantitative drilling cuttings will be generated and discharged out of the wellhead together with the drilling mud. AAG Energy recycles the drilling mud and cuttings after treatment to reduce a large amount of mud emissions, and the cuttings is used to fill the floor of the well site. The Company has set up reminders and warning signs at all temporary storage places of spent desulfurizer, and formulated measures to prevent scattering and drenching. The Company's household waste is collected and delivered to the municipal department for disposal.

廢棄物管理

項目施工期與營運期會產生鑽井泥漿、 鑽井岩屑、建築垃圾、廢脱硫劑及生活 垃圾等無害廢棄物,以及由於設備維護 產生的廢機油、廢棉布等有害廢棄物。 亞美能源嚴格遵守《中華人民共和國固體 廢物污染環境防治法》,對各類廢棄物進 行規範處理,將對環境的影響降至最低。

鑽井過程中會產生定量鑽井岩屑,並隨 鑽井泥漿排出井口。亞美能源對鑽井泥 漿及岩屑進行處理後循環使用,以減少 大量泥漿排放量,岩屑則用於填墊井 場。公司對廢脱硫劑所有臨時貯存場所 設置提示、警告標誌,並制定防揚散、 防雨淋措施方案。公司的生活垃圾集中 收集後交由市政部門處置。

Data Sheet of AAG Energy Non-hazardous Waste in 2019 亞美能源 2019 年無害廢棄物數據表

Non-hazardous Waste 無害廢棄物	Unit 單位	In 2019 2019年
Drilling cuttings 鑽井岩屑	ton 噸	13,514.43
Drilling cuttings density 鑽井岩屑密度	ton/million m³ 噸/百萬立方米	14.51
Construction waste 建築垃圾	ton 噸	0.60
Construction waste density 建築垃圾密度	ton/million m³ 噸/百萬立方米	6.44×10-4
Spent desulfurizer 廢脱硫劑	ton 噸	2,126.00
Spent desulfurizer density 廢脱硫劑密度	ton/million m³ 噸/百萬立方米	2.28
Household garbage 生活垃圾	ton 噸	179.37
Household garbage density 生活垃圾密度	ton/million m³ 噸/百萬立方米	0.19

During the operation of the project, a small amount of hazardous waste such as waste engine oil and waste cotton cloth will be generated due to conventional equipment maintenance. The Company continuously strengthens the management of hazardous wastes by setting up special storage areas for hazardous waste and dividing them into temporary storage areas for liquid hazardous waste and temporary storage areas for solid hazardous waste. The storage areas adopt enclosed buildings as a whole, with protective measures such as awnings, lightning protection grounding, ground hardening treatment, and antileakage protection, and are managed by a dual-personnel and dual-lock system. The temporary storage areas are equipped with sufficient fire safety facilities, emergency spill treatment materials, and supporting salvage facilities (such as eye washers, etc.).





Hazardous Waste Storage Area (Left: Waste Mineral Oil Storage Area; Right: Solid Hazardous Waste Storage Area) 危險廢物存儲區

(左圖:廢礦物油存儲區;右圖:固體危險廢物存儲區)

Data Sheet of AAG Energy Hazardous Waste in 2019 亞美能源 2019 年危險廢棄物數據表

Hazardous waste 危險廢棄物	Unit 單位	In 2019 2019年
Used engine oil 廢機油	ton 噸	12.63
Waste oil barrel 廢機油桶	ton 噸	2.66
Waste cotton cloth 廢棉布	ton 噸	1.11
Molecular sieves 分子篩	ton 噸	1.18
Pesticide bottles 農藥瓶	ton 噸	0.02

Energy and Resources Management

AAG Energy has effectively improved the efficiency of resources and energy use by improving energy consumption management and carrying out energy-saving and water-saving transformations.

AAG Energy's diesel consumption comes from the use of oil-fired generators and construction diesel vehicles during the construction period of the projects. The gasoline consumption comes from the Company's vehicles. The Company's purchased natural gas is used for the operations of the project office buildings, purchased electricity for office of headquarter and production of Panzhuang and Mabi projects, and self-produced CBM for domestic energy consumption at the gas gathering station and the dispatch management center of the Mabi project. In 2019, the Company implemented a series of engineering innovation projects, including transforming the motor of compressor to variable frequency motor, energy-saving renovation of roots blower and so on, while encouraging employees to save electricity and reduce business travel and use of vehicles in their daily life, which achieved significant energy savings throughout the year.

能源資源管理

亞美能源通過改善能耗管理,開展節能 節水改造行動,切實提升資源能源使用 效率。

亞美能源柴油消耗來自項目建設期的燃油發電機、施工柴油車使用,汽油消耗均來自公務用車,公司外購天然用於項目辦公樓生活使用,外購電力於潘莊、馬必及總部辦公生產站與用於馬必項目集氣站與有人。2019年,與美能源實施壓縮機變頻改造、羅茨風機等生的的用電用水,減少差旅及車輛使用次數,全年節約能源效果顯著。

Case: Roots Blower Energy Saving Transformation

AAG Energy's master gas gathering and transportation station employs several Roots blowers. Due to the simple design of the blower manufacturing process and the rough tolerance fit, after a long-term operation of the unit, the power gradually increased, so was the energy consumption. In 2019, after in-depth understanding of the Roots blower, energy maintenance personnel of AAG Energy carried out maintenance work on a regular basis, which significantly reduced the current and improved the equipment operating efficiency. Each blower could save more than 100,000 kWh of electricity a year.

案例:羅茨風機節能改造

亞美能源集輸總站使用數台羅茨風機, 風機制造工藝設計較簡易,公差配合較 粗糙,機組長時間運行後功率逐漸增 大,能源消耗增加。2019年,亞美能源 維修人員對羅茨風機深入瞭解後,開展 定期檢修工作,使得風機電流顯著降 低,設備運行效率提高,每台風機一年 可節約電量超過10萬度。

Data Sheet of AAG Energy's Energy and Resources Consumption from 2017 to 2019 亞美能源 2017–2019 年能源消耗數據表

Use of Energy 能源使用	Unit 單位	In 2017 2017年	In 2018 2018年	In 2019 2019年
Purchased Electricity	MWh	79,187.00	99,156.00	117,771.19
外購電力	兆瓦時			
Purchased Gas	m^3	17,338.35	17,425.00	13,723.00
外購天然氣	立方米			
Purchased Gasoline	liter	302,829.00	214,090.00	453,075.00
外購汽油	升			
Purchased Diesel	liter	301,080.00	450.00	27,630.00
外購柴油	升			
Self-Produced CBM	m^3	3,387,796.20	1,596,623.0	211,351.52
自產煤層氣	立方米			
Comprehensive Energy Consumption	ton	13,563.40	13,913.80	15,264.33
綜合能耗	噸			
Comprehensive Energy Consumption/	ton/million m³			
per Million Cubic Meter CBM				
Produced		21.50	17.40	16.39
綜合能耗/生產百萬立方煤層氣	噸/百萬立方米			

AAG Energy's production water is mainly the supplementary water for circulating cooling of compressors at the gas gathering and transportation station and gas gathering stations, and the rest is domestic water consumed by employees, water for greening and road sprinkling inside the stations. The Company continuously strengthens water conservation management throughout the process from water source, water access to water consumption in production areas. Through technological transformation and process optimization, as well as measures such as promoting secondary utilization of sewage and carrying out water conservation publicity, the Company continuously improves water resource utilization efficiency. AAG Energy promotes the reuse of domestic sewage in Management Center. Through the biochemical treatment system with two-stage filtration, the domestic sewage goes into the softener and cartridge, and then the reverse osmosis system for treatment to be used for greening and road sprinkling.

2017–2019 AAG Energy's Total Water Consumption Data Comparison Table 亞美能源 2017–2019 年總耗水量數據對比表

Water Use 水資源使用	Unit 單位	In 2017 2017年	In 2018 2018年	In 2019 2019年
Total water consumption 耗水總量	ton 噸	172,272.00	78,627.00	102,688.61
Total water consumption density 耗水總量密度	ton/million m³ 噸/百萬立方米	273.40	98.00	110.29

Data Sheet of AAG Energy's Water Use in 2019 亞美能源 2019 年水資源使用數據表

Water use 水資源使用	Unit 單位	In 2019 2019年
Municipal water supply	ton	52,323.00
市政供水	噸	
Resident water delivery	ton	48,526.80
居民送水	噸	
Self-contained well water	ton	1,838.81
自備井用水	噸	

Response to Climate Change

Climate change is having an increasingly obvious impact on the oil and gas industry, opportunities and challenges coexist. On the one hand, the adjustment of energy mix caused by climate change has promoted the demand increase for clean energy or renewable energy; on the other hand, the more difficulties in fossil fuel exploitation have increased the costs of production and operating, while the increase in extreme weather has brought more uncertainties to field operations such as drilling.

As a leading energy company in CBM exploration and development in China, AAG Energy focuses on the development and production of clean energy. Its product of CBM is an associated mineral resource of coal with a calorific value equivalent to that of natural gas and can serve as an important supplementary energy to natural gas. In addition, the main component of CBM is methane, which compared with coal, has an extremely low content of impurities such as sulfur and inorganic nitrogen, and its emissions of sulfur dioxide, nitrogen oxides, dust and other pollutants produced after combustion are much lower than those produced by coal combustion; and compared with conventional fuels, CBM has the lowest carbon to hydrogen ratio and the lowest content of carbon oxides in combustion products, which helps to reduce greenhouse gas emissions. In response to the challenges from climate change actively, AAG Energy continuously improves its production technologies and methods to reduce the impact of climate change on itself.

The greenhouse gas emissions involved in the production and operation of AAG Energy mainly come from fuel emissions for production and domestic use (self-produced CBM, purchased natural gas, etc.), emissions from construction diesel vehicles and fuel generators, emissions from company vehicles and indirect emissions from purchased electricity. In 2019, AAG Energy's carbon dioxide emissions equivalent was 117,110.21 tons with a density of 125.78 tons per million cubic meters.

應對氣候變化

氣候變化正對油氣行業產生日益明顯的 影響,機遇與挑戰並存。一方面,由於 氣候變化產生的能源結構調整,促使清 潔能源或可再生能源需求增加;另一方 面,化石能源開採愈加困難,使生產運 營成本提高,而極端天氣的增加對野外 作業(如鑽井)又帶來更多不確定因素。

亞美能源在生產經營過程中涉及到溫室氣體排放,主要來自生產生活使用燃料排放(自產煤層氣、外購天然氣等)、施工柴油車與燃油發電機排放、公務用車排放以及外購電力間接排放。2019年,亞美能源二氧化碳排放當量為117,110.21噸,密度為125.78噸/百萬立方米。

2017-2019 AAG Energy GHG Emissions Data Sheet 亞美能源 2017-2019 年溫室氣體排放數據表

GHG 溫室氣體	Unit 單位	In 2017 2017年	In 2018 2018年	In 2019 2019年
Emissions Equivalent CO ₂ 溫室氣體排放二氧化碳當量GHG	ton 噸	116,186.00	116,467.40	115,547.42
GHG Emissions per Million Cubic Meters CBM Produced	ton/million m ³	184.40	136.10	124.10
百萬立方米CBM產能的溫室氣體排放量	噸/百萬立方米			

Data Sheet of AAG Energy GHG Emissions in 2019 亞美能源 2019 年溫室氣體排放數據表

GHG 溫室氣體	Unit 單位	In 2019 2019年
CO ₂ equivalent of GHG emissions (Scope 1)	ton	1,544.91
溫室氣體排放二氧化碳當量(範疇一)	噸	
CO ₂ equivalent of GHG emissions (Scope 2)	ton	114,002.51
溫室氣體排放二氧化碳當量(範疇二)	噸	
GHG emissions per million cubic meters of	ton/million m³	
CBM capacity (Scope 1)		1.66
百萬立方米CBM產能的溫室氣體排放量(範疇一)	噸/百萬立方米	
GHG emissions per million cubic meters of	ton/million m³	
CBM capacity (Scope 2)		122.44
百萬立方米CBM產能的溫室氣體排放量(範疇二)	噸/百萬立方米	

Ecological Environment Protection of Mines

In order to achieve sustainable and coordinated development between mineral resources development and ecological environmental protection, and to reduce and avoid the damage to the ecological environment in concession areas, AAG Energy complies with and implements the Mineral Resources Law of the People's Republic of China. It has formulated a plan for ecological environment protection and comprehensive management of mines and fully implemented to actively improve the production environment of mining enterprises and the living environment of residents in the concession areas, and assisted in guiding the enterprises around the mines to complete the ecological protection goals and effectively restore the mining ecology. In the process of mine ecological protection and management, AAG Energy adhered to the principle of "exploiting while governing", and carried out timely restoration and management through biological, engineering and management measures. It divided the areas to be treated into key treatment areas, sub-key treatment areas and general treatment areas, and the locations of the areas into side slope management areas, greening areas for forest and grassland, and dedicated road greening areas to carry out ecological management in a scientific and reasonable manner.

AAG Energy attaches great importance to land protection and utilization. Through the optimization of well placing design, the single-well site was changed to shared well site for multiple wells, which greatly reduced the land utilization area for well site and the total land-use area for optimized shared well sites was reduced approximate 7,600 square meters compared with that of single-well sites.

礦山生態環境保護

為實現礦產資源開發與生態環境保護可 持續協調發展,減少和避免區塊範圍內 生態環境破壞,亞美能源遵守落實《中華 人民共和國礦產資源法》,制定了礦山生 態環境保護與綜合治理方案並且全面實 施,積極改善礦山企業生產環境和項目 區人民生活環境,並協助指導礦山周邊 企業完成生態保護目標,有效修復礦山 生態。在礦山生態保護與治理過程中, 亞美能源堅持「邊開採、邊治理」的原 則,通過生物、工程和管理措施及時開 展恢復治理。將待治理區域劃分為重點 治理區、次重點治理區以及一般治理 區,並將區域位置分為邊坡治理區、宜 林宜草地綠化區以及專用道路綠化區, 科學合理地進行生態治理工作。

亞美能源重視土地保護與利用,通過布井設計優化,由之前的單井式井場改為多井共用式井場,大幅降低井場佔地面積,優化後的井場總面積比單井式井場佔地總面積減少約7,600平方米。

Case: Elimination of Geological Disasters with Side Slope Greening Treatment

Due to the long-time rain wash of the landslides and stone falloffs occurred on slopes of the well site MB01-B2-93 in the Mabi concession of AAG Energy, which seriously affected the normal production and operation safety of the well group and the ecological environment. In November 2019, AAG Energy carried out slope improvement and greening operations to acquire a completely new outlook.

案例:消除地質災害,邊坡綠化治理

亞美能源馬必項目中MB01-B2-93井場由於久經雨水沖刷,致使井場護坡出現了泥土滑坡、石塊散落等現象,嚴重影響井組的正常生產運行安全及生態環境。2019年11月,亞美能源開展邊坡整治及綠化作業,地貌較整治前煥然一新。





(左圖:施工前;右圖:施工後)

4. Stable Operation and Win-Win Cooperation 穩健運營 合作共贏

AAG Energy always advocates a low-carbon and sustainable operation mode, and is committed to providing stable green energy supply for social production and people's livelihood. At the same time, AAG Energy strengthens integrity and compliance internally and drives cooperation and growth together with the external supply chain to achieve win-win development.

亞美能源始終倡導低碳可持續的運營方式,致力於為社會生產與民生提供穩定綠色能源供應,同時,對內強化誠信合規,對外積極帶動供應鏈團結協作、相益成長,努力實現供應鏈共贏發展。

4.1 Consistently Stable Supply of High-Quality Gas

AAG Energy regards high-quality and stable gas supply as the baseline. It strengthens production and operation from the technical level to lay a solid foundation for ensuring energy supply and product quality.

4.1 持續高質穩定供氣

亞美能源視高質穩定供氣為基準線,從 技術層面提高生產運營水平,為保障能 源供應與產品質量打下堅實基礎。

2017-2019 AAG Energy CBM Production Data Sheet 亞美能源 2017-2019 年煤層氣產量數據表

Gas Production	Unit	In 2017	In 2018	In 2019
氣產量	單位	2017年	2018年	2019年
Gas Production 產氣量	million m³ 百萬立方米	629.84	802.21	931.09

In 2019, AAG Energy formulated the Technical Management System (《技術管理體系》) of internal control management system, including Technical Innovation Management System (《技術創新管理制度》), Small and Micro Innovation Management System (《小微創新管理制度》), and Technology Innovation Fund Management System (《技術創新基金管理制度》), drafted work procedures for key technologies and kept up-to-date with national standards, industry standards, and partner enterprise standards in relation to key technologies such as geology, drilling, fracturing, and drainage to ensure that the key technologies meet the latest technical specifications and ensure quality production.

2019年,亞美能源制定了《技術管理體系》內控管理制度,包括《技術創新管理制度》、《小微創新管理制度》、《技術創新基金管理制度》,起草關鍵技術工作流程,對地質、鑽井、壓裂、排採等關鍵技術有關的國家標準、行業標準、合作方企業標準等進行查新,確保關鍵技術符合最新技術規範要求,保障產品高質量生產。

4. Stable Operation and Win-Win Cooperation 穩健運營 合作共贏

In response to the drilling part with the heaviest workload in operation, the Company implements standardized and procedural management. According to the characteristics of drilling construction and operation, the Company improved the Safety Standardization Compilation System of the Drilling Supervision Department (《鑽井監管部安全標準化彙編制度》), compiled such procedural documents as Safety Production Responsibility System of the Drilling Supervision Department (《鑽 井監管部安全生產責任制》), Drilling Supervision Management Procedures (《鑽井監督管理程序》), Drilling Assessment Rules (《鑽 井考核細則》), and Safety Hazard Inspection Procedures of the Drilling Supervision Department (《鑽井監管部安全隱患檢查程序》) etc., refined the drilling quality requirements, and clarified the rules for contractor construction management, reporting procedures and other aspects to improve the overall quality management.

針對運營中工程量較大的鑽井環節,公司推行標準化、程序化管理,根據鑽井施工運行特點梳理完善《鑽井監管部安全標準化彙編制度》,彙編《鑽井監管部安全生產責任制》、《鑽井監督管理程序》、《鑽井考核細則》、《鑽井監管部安全隱患檢查程序》等程序文件,細化鑽井質量要求,明確承包商施工管理要求、彙報程序等各方面管理細則,整體提升了質量管理。

In 2019, AAG Energy received no product complaints and achieved a surveyed customer satisfaction rate of 100%.

AAG Energy actively carries out technological innovation, attaches great importance on the protection of intellectual property rights while respecting external intellectual property rights. In 2019, AAG Energy conducted feasibility studies and experiments on microwave-induced permeability enhancement of coal reservoirs, and cooperated with external institutions to carry out research and innovation projects such as "Research on the Transmission Law of Microwaves in Coal Rocks" and "Research and Experiment of Indirect Fracturing Technology". In 2019, AAG Energy invested a total of RMB14.484 million in technology innovation.

2019年,亞美能源未出現產品投訴情況,客戶滿意度調查結果為100%。

亞美能源積極開展技術創新,重視知識產權維護,並尊重外部知識產權。2019年,亞美能源進行了煤儲層微波增滲可行性研究與試驗,與外部機構合作開展「微波在煤巖中的傳輸規律研究」、「間接壓裂技術研究與試驗」等研究創新項目。2019年,亞美能源科技創新投入共計1448.40萬元。

In 2019, AAG Energy ran technical communication seminars jointly with various parties. The internal seminars included technical discussions on drilling, fracturing, drainage, etc., and international reserves reporting preparation conference. Meanwhile, the Company held technical symposiums with academic research institutions, suppliers, contractors and other partners, and organized or participated in technical activities, such as communication, training or research activities on natural gas efficient development, indirect fracturing, as well as CBM annual conferences.

2019年,亞美能源聯合多方進行了技術交流研討活動,在公司內部舉辦了鑽井、壓裂、排採等技術方案討論會、國際儲量編制討論會等;同時與外部學術研究機構、供應商、承包商等合作方強行技術交流會,組織參加了天然氣高效開發、間接壓裂、煤層氣年會等技術交流、培訓和調研活動。

4.2 Integrity and Compliance

AAG Energy is committed to creating a corporate culture of integrity and fairness, and strictly abiding by the Company Law of the People's Republic of China. In 2019, the Company revised the Anti-fraud and Reporting System (《反舞弊與舉報制度》) to further detail the senior management's responsibilities in anti-fraud work, improve and optimize the power balance mechanism in the original internal control system to put an end to corruption and fraud.

In 2019, through improving the anti-fraud and reporting mechanism and organizing anti-fraud and reporting training and special events, the Company created a satisfactory anti-fraud atmosphere and initially achieved the goal of "reinforcing upright culture by strictly enforcing disciplines, promoting development by resolutely tackling challenges". In the year of 2019, there was no lawsuit caused by corruption and fraud occurred.

In 2019, on the basis of the original anti-fraud reporting and prevention through email and public account, the Company promoted the WeChat reporting application which expanded the reporting channels to facilitate internal employees, external suppliers, customers and other people to report illegal activities such as violations of laws and regulations and the whistleblower can check the investigation progress of the reported clues at any time. Since the launch of the WeChat reporting channel in 2019, the effective clues obtained from this channel have accounted for 50% of all clues.

At the same time, in order to keep up with the system revision and the innovation of reporting channel, the Company carried out a series of training, publicity and cultural construction activities, which promoted the implementation of the anti-fraud and reporting mechanism and advanced the Company's overall upright culture construction. As of December 2019, a total of 6 effective clues were received, higher than the total of reported clues from 2015 to 2018.

4.2 堅守誠信合規

亞美能源始終致力於營造誠信、公正的公司文化,嚴格遵守《中華人民共和國公司法》。2019年,公司修訂了《反舞弊與舉報制度》,進一步細化了高級管理層在反舞弊工作中的職責,完善和優化了原有內控體系內的權力制衡機制,杜絕腐敗舞弊行為。

2019年公司通過完善反舞弊與舉報機制、組織反舞弊與舉報培訓及專項活動,營造了良好的反舞弊反欺詐文化氛圍,初步達成「正風肅紀強文化,攻堅克難促發展」的正風建設目標。2019年度,公司未發生因腐敗舞弊引起的訴訟事件。

2019年公司在原有通過郵箱及公眾號進行反舞弊舉報與防範基礎上,推廣了微信舉報,擴充了舉報途徑,便於內部員工、外部供應商、客戶等人士向公司舉報違法違規等不良行為,舉報人可隨時查看舉報線索調查進度。自2019年微信舉報渠道上線以來,該渠道所獲取的有效舉報線索佔比50%。

同時,為配合制度修訂與舉報途徑創新,公司開展了一系列培訓、宣傳與文化建設活動,積極推動了反舞弊與舉報機制工作的落地,促進了公司整體正風文化建設。截至2019年12月,共收到有效舉報線索6條,高於2015年至2018年累計舉報線索總數。

Introduction of "Anti-Fraud and Reporting System" 《反舞弊與舉報制度》宣講

Lecture on "Prevention of Duty-related Crimes" 《預防職務犯罪》講座

A total of 5 presentation meetings were organized External lawyers were invited to explain at two lectures throughout the year, involving 13 departments of the with 93 participants in total. Company, with more than 460 participants.

全年共組織5次宣講,涉及公司13個部門,參與人員超過 邀請外部律師講解,兩場講座參與人數93人。 460人次。



"Prevention of Duty-related Crimes" Lecturing Site 《預防職務犯罪》講座現場

Case: AAG Energy Upright Culture Construction

On September 29, 2019, the Company held a kick-off conference for the establishment of an upright culture with the theme of "By Company-wide Upright and Clean Governance, Creates Excellence". The conference made clear the significance, key points and principles of corporate management and upright culture building and made arrangements for specific events. This special series of events lasted for 3 months, involving personnel at all levels of the Company and suppliers, supplemented by activities such as the selection of model workers upholding integrity and pacesetters pursuing morality and the "AAG Energy Special Month on Integrity", which raised the awareness of integrity among all levels of employees.

Achievements of AAG Energy Upright Culture Construction: 正風建設專項活動成果:

- Recovered WeChat survey questionnaires: 393 copies
 回收全員微信調查問卷: 393份
- Solicited posters: 30 copies
 徵集海報作品: 30份
- Signed the "Letter of Commitment to Upright Culture Construction": 353 copies 簽署《正風建設承諾書》: 353份
- Drafted a list of activities for "self-examination and self-correction": 15 copies 起草 "自查自糾"活動清單:15份
- Updated the "Employee Handbook" 更新《員工手冊》
- Revised the "Letter of Commitment to Honest Transactions for Suppliers" 修訂《供應商誠信交易承諾書》

案例:亞美能源正風建設專項活動

2019年9月29日公司召開了「氣正風清, 鑄建卓越,一路有我」正風建設啟動會, 會議明確了公司管理與正風建設的意義、關鍵點及原則,對具體活動進行了 部署安排。專項系列活動歷時3個月,涉 及公司各層級人員及供應商,並開展了 正風衛士及模範道德標兵評選、"廉潔亞 美專題月"等活動,提高了各層級員工廉 潔守法意識。

4.3 Supporting Suppliers to Grow Together

AAG Energy formulated a supplier management system which combined with the characteristics of CBM projects, standardized the Company's procurement procedures and improved the efficiency of supplier management, so as to achieve sustainable common development with suppliers.

In order to standardize the procurement process, the Company conducts open, transparent and efficient bidding and procurement. It established a procurement management system, and formulated a series of procurement system documents, such as Administrative Measures for Bidding and Tendering (《招投標管理辦法》), Regulations on Materials Management (《物資管理規定》) and Procurement Regulations (《採辦規定》) to clarify the responsibilities of each department and effectively manage the Company's procurement activities, meanwhile, implemented the procurement management regulations to be effectively applied in all procurement activities involving engineering supplies, equipment and materials and technical services related to the Panzhuang and Mabi projects of the Company, as well as the procurement activities required by the functional departments of the headquarters.

4.3 供應商共同成長

亞美能源制定了供應商管理制度,結合 煤層氣項目特點,規範了公司採購程 序,提高了供應商管理工作效率,與供 應商共同實現可持續發展。

為規範採購流程,進行公開透明高效的招投標採購,亞美能源建立了採購管理辦法》、《招投標管理辦法》、《招投標管理辦法》、《採辦規定》等一系列採購度文件,以明確各部門職責,有效效管理分司採購活動。同時落實採購工作管理規定,切實運用於公司潘莊、馬班寶運用於公司潘莊、馬斯寶運用,以及總部各職能部門的採購活動。

The department with a procurement demand submits a demand application which will be approved in accordance with the Authority Management Measures (《授權管理辦法》) of the Company;

採購需求部門提出需求申請,按照公司《授權管理辦法》審批程序批准

Applications for material procurement and engineering and service procurement undergo different approval processes;
物資類採購需求與工程、服務採購需求按不同程序進行審批流程

The Procurement Department reviews the application by the department with procurement demand to determine the procurement method;

採購部對採購需求部門上報的材料進行審核,確定採購方式

The Procurement Department needs to identify the Company's related party transactions by referring to the list of related transaction partners provided by the Secretary of the Board.

採購部需參照董祕辦提供的關聯交易合作方名單對公司關聯交易進行相應的識別

Schematic of AAG Energy Procurement Process 採購流程示意圖

AAG Energy formulated the Supplier Management Regulations (《 供 應 商 管 理 規 定 》) to standardize management of key information in relation to pre-qualification of suppliers, supplier classification, establishment and use of supplier databases, and supplier performance management. In the process of engaging suppliers/contractors, AAG Energy carefully selects qualified suppliers/contractors that meet the Company's various requirements regarding technology, quality, schedule, safety, etc. while continuously developing potential qualified suppliers/ contractors in the market in accordance with actual conditions. AAG Energy conducts pre-qualification and qualification review of potential suppliers/contractors. The pre-qualification methods include on-site investigations, technical exchanges, etc., and qualification review involves basic information (including qualifications, technologies and management capabilities, etc.), safe production permits, similar work experience and other relevant information. For new suppliers, a "New Supplier Application" will be filled in and submitted with all relevant information about the supplier in the ERP system of the Company according to actual needs, which will be approved in the system after review by the Procurement Department.

In 2019, AAG Energy had a total of 360 suppliers, of which all of them are domestic suppliers except one located in North America.

亞美能源制定了《供應商管理規定》,對 供應商資格預審、供應商分類、供應商 庫的建立和使用、供應商績效管理等關 鍵信息進行規範管理。在聘用供應 商/承包商過程中,亞美能源審慎選擇 符合公司技術、質量、工期、安全等各 項要求的合格供應商/承包商,同時結 合實際情況不斷開發市場中潛在的合格 供應商/承包商。亞美能源對潛在的供 應商/承包商進行資格預審與資質審 查,預審方式包括現場調查、技術交流 等方式, 資質審查則包括基本情況簡介 (包括資質、公司技術及管理力量等)、 安全生產許可證、類似工作經驗等相關 信息。對首次合作的項目供應商,根據 實際需要在公司系統中填寫《新建供應商 申請》,提供所有相關的供應商信息,經 採購部門審核後在系統中批准新建。

2019年,亞美能源共計擁有供應商360 家,其中一家北美供應商,其餘全部為 境內供應商。

AAG Energy always regards "people" as the most valuable asset of the Company and insists on putting people first in the process of cultural construction and business operation. It internally practices the people-oriented management philosophy, focusing on talent cultivation and employee care to build a perpetual driving force for the Company's sustainable development. Externally it pays close attention to the impact of its own business development on the health, safety and environment of local residents, strives to keep regular communication with communities, carries out community assistance projects to support local economic, social, and cultural development in order to achieve common development with employees and communities.

亞美能源始終視「人」為企業最寶貴的財富,在文化建設與企業運營過程中堅持以人為本。亞美能源對內始終踐行人本管理理念,注重人才培養和員工呵護,以打造企業長青的可持續發展驅動力。對外則密切關注自身業務發展對當地社區居民的健康安全環境影響,努力將社區溝通常態化,開展社區幫扶項目支持當地經濟、社會、文化生活,實現企業與員工並肩同行,與社區共同成長。

5.1 Respecting Employees' Rights and Interests

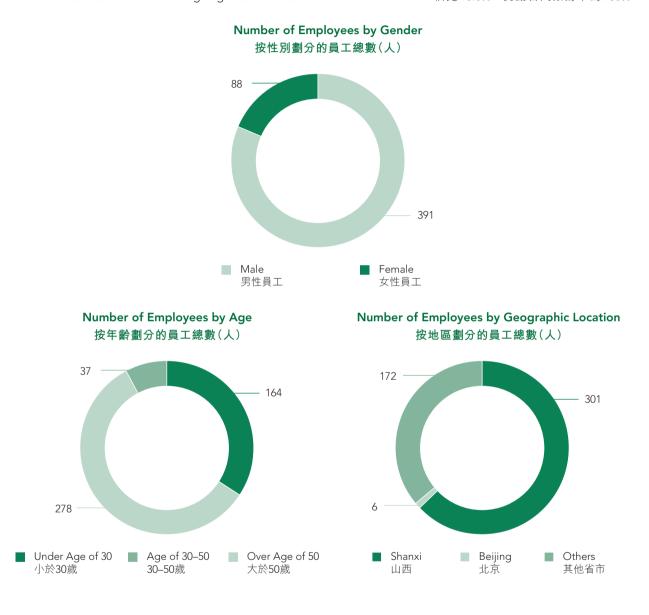
AAG Energy strictly abides by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Regulations on Prohibition of the Use of Child Labor, and other laws and regulations to constantly improves the human resource management system. Based on the principle of personnel and post matching, the Company formulated the Recruitment Policy (《招聘政策》) in 2019 to strengthen the management of personnel recruitment and employment. AAG Energy conducts fair and impartial talent recruitment from open channels such as on-site recruitment, campus recruitment, commissioned recruitment, media recruitment, online recruitment, headhunting service, and internal recruitment, eliminates discrimination based on gender, ethnicity, marital status, religion, etc. from all aspects of employee recruitment, training, and promotion, and prevent nepotism with policies formulation to ensure equal opportunities for employees' professional development, to provide an inclusive and open development platform for diverse talents, and to provide sufficient and reasonable human resources for business operations. We resolutely resist the recruitment of child labor, forced labor and the harassment and abuse. In 2019, there were no violations or complaints related to human rights and labor practices occurred.

5.1 尊重員工權益

亞美能源嚴格遵守《中華人民共和國勞動 法》、《中華人民共和國勞動合同法》、 《禁止使用童工規定》及相關法律法規, 不斷完善人力資源管理體系。2019年公 司制定了《招聘政策》,從人崗適用原則 出發,加強人員招聘、錄用管理。亞美 能源從現場招聘、校園招聘、委託招 聘、媒體招聘、網絡招聘、獵頭服務、 內部招聘等公開渠道進行公平、公正的 人才招聘,在員工聘用、培訓、晉升的 各個環節中杜絕性別、民族、婚姻狀 況、宗教等歧視,制定親屬迴避政策, 最大程度保障員工職業發展機會平等, 為多元化人才提供包容開放的發展平 台,為公司經營提供充足、合理的人力 資源。我們堅決抵制招聘童工、強制勞 動和騷擾虐待等行為發生,2019年未出 現與人權及勞工措施相關的違規事件或 任何申訴。

As of 31 December 2019, AAG Energy employed 479 employees, including 6 disabled persons, and female employees accounted for 18.6%. Its labor contract signing rate was 100%.

截至2019年12月31日,亞美能源僱傭 479名員工,其中殘疾人6名,女性員工 佔比18.6%,勞動合同簽訂率為100%。



Data Sheet of AAG Energy Employee Turnover in 2019¹ 亞美能源 2019 年員工離職數據表 ¹

Employee Category 僱員類別	Employee Turnover Rate in 2019 2019年員工流失率
Total 總計	2.87%
Number of Employees by Gender 按性別劃分	
Male 男性	3.26%
Female 女性	1.12%
Number of Employees by Age 按年齡劃分	
< 30 (year) 歲	0.00%
30 – 50 (year) 歲	4.79%
> 50 (year)	0.00%

In terms of the remuneration system, the Company strictly abides by laws and regulations. In 2019, the Company formulated the Remuneration Management System (《薪酬管理制度》) to provide employees with market-competitive salaries and benefits on the basis of internal fairness and personnel and positions matching.

The Company adopted incentive measures to unleash the potential of employees. Such as awarding "Special Contribution Awards" to employees who achieved major achievements such as major technological innovations and significant cost savings. In addition, the Company guaranteed employees to enjoy statutory holidays and vacations in accordance with the law, and paid endowment insurance, medical insurance, unemployment insurance, work-related injury insurance, housing provident fund and supplementary medical insurance for employees. The social insurance coverage of its employees in 2019 is 100%

在薪酬體系方面,公司嚴格遵守法律法規,2019年公司制定《薪酬管理制度》,在體現內部公平和人崗匹配的基礎上,為員工提供具有市場競爭力的薪資與福利。

公司採取激勵措施以激發員工潛能,對於實現重大技術革新、節省大量成本等獲得重大成就的員工頒發「特殊貢獻獎」。此外,公司依法保障員工享受法定節假日及假期,併為員工繳納養老保險、醫療保險、失業保險、工傷保險、住房公積金及補充醫療保險,2019年員工社會保險覆蓋率為100%。

In 2019, the Company carried out organizational restructuring. The turnover rate data may not reflect the true situation, so the voluntary turnover rate is disclosed herein.

²⁰¹⁹年公司開展組織架構調整,離職率數據無法反應人員流失真實情況,故此處披露主動離職率。

AAG Energy believes that employees' health and occupational hygiene are of vital importance to the Company, and strictly implements the occupational health management in accordance with the Occupational Disease Prevention and Control Law of the People's Republic of China and other relevant laws and regulations. The Company regularly organized employees for health examination, strengthened the occupational health management of field workers, established personal health files and continuously improved the working environment so as to ensure their occupational health and safety. In 2019, the Company's occupational health examination program covered all employees with possible exposure to health hazards. According to the Administrative Measures for Occupational Health Surveillance and Supervision of Enterprises (No. 49) (49號 令 《用人單位職業健康監護監督管理辦法》) issued by the National Production Safety Supervision Department (Now "Ministry of Emergency Management of the People's Republic of China") in 2012, we conducted the occupational health hazards identification and took the samplings for analysis in the work place. In addition, employees had occupational health examinations according to the Technical Specifications for Occupational Health Surveillance (《職業健康監護技術規範》) (GBZ188-2014). The number of medical examinations for occupational diseases was 144, and the number of occupational diseases was zero.

亞美能源深信員工的職業健康至關重 要, 並嚴格按照《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。定期組織員工進行健康體檢,加強 現場作業人員的職業健康管理,建立健 康檔案,並持續改善工作環境,保障員 工職業健康安全。2019年,本公司的職 業病檢查覆蓋所有存在職業病風險崗位 的員工。根據國家安監總局(現稱為「中 華人民共和國應急管理部1)發布的2012 年49號令《用人單位職業健康監護監督 管理辦法》,對工作場所產生的職業病危 害因素進行調查分析,依據《職業健康監 護技術規範》(GBZ188-2014), 進行了職 業健康檢查,職業病體檢人數為144人, 職業病發病人數為零。

5.2 Supporting Employee Development

The Company continuously improves its employee promotion and development system to provide employees with broad career development space. In 2019, AAG Energy formulated the Management Measures for the Promotion of Personnel below the Middle Level (Trial) (《中層以下人員晉升管理辦法(試行)》), which further standardized the Company's talent development system and divided job positions into eight categories of technical personnel, supervisory personnel, facility and equipment personnel, safety personnel, administrative personnel, on-site personnel, logistics personnel, and headquarters personnel. It identified key positions for the projects, clarified the standards of professional knowledge, abilities, and skills for different positions at different levels to provided a basis for talent selection, employment, cultivation, and retention. The standardized employee promotion system clarified the development direction of employees and provided the resources available for their learning and growth to help employees make career plans in advance and drive the Company's sound and long-term development. At the same time, AAG Energy adhered to the principles of "continuous incentives, equal emphasis on morality and competence, fairness and impartiality" to determine the members of the "leading group" that evaluates the promotion of employees at each level, further standardized the promotion standards and procedures for management positions, and created a fair, impartial, and open internal employment environment to steadily advance the Company's talent channelization.

5.2 助力員工發展

公司不斷健全晉升發展體系,為員工提 供廣闊的事業發展空間。2019年,亞美 能源制定《中層以下人員晉升管理辦法 (試行)》,進一步規範了公司人才發展體 系,將工作崗位劃分為技術類、監督 類、設施設備類、安全類、行政職能 類、現場類、後勤類以及總部共八大類 職能,通過識別確定項目關鍵崗位,明 確不同崗位、崗級的專業知識、能力、 技能標準,為人才的選、用、育、留提 供依據。規範的晉升體系明確了員工的 發展方向,併為其匹配成長學習可運用 的資源,幫助員工提前做好職業生涯規 劃,驅動公司健康長遠發展。同時,亞 美能源秉承 「持續激勵、德才並重、公平 公正]原則,明確每一職級員工晉升實 施考評的「領導小組」成員,進一步規範 員工管理職務晉升標準與流程,營造公 平、公正、公開的內部用工環境,穩步 推動公司人才管道化建設。

In the principle of "anticipation, systematization, pertinence, and standardization", AAG Energy provides targeted and diversified training for employees in order to build a learning organization and create a good team atmosphere of mutual learning and continuous innovation. In 2019, AAG Energy established a comprehensive training system, formulated the Training Management System (《培訓管理制度》), and completed the compilation of the Employee Handbook. The Company tailored training programs for middle and senior management to improve their knowledge structure, cultivated inter-disciplinary management staff with expertise to enhance the capabilities in decision-making, strategic development and modern business management. At the same time, the Company organized employees to participate in internal training, cross-departmental training and supplementary training to improve the job competence of current employees, as well as their knowledge, skills, and working methods, to achieve shared development of the organization and individuals.

Data Sheet of AAG Energy Employees Training in 2019 亞美能源 2019 年員工培訓數據表

Classification 劃分類別	category 指標名稱	Number of trainees 受訓人數(人)	Training percentage 受訓百分比	Total training time(hrs) 受訓總時長 (小時)	Average training time(hrs) 平均受訓時長 (小時)
Total 總計		479	100%	19,317	40.33
By Gender	Male 男性員工	391	100%	13,526	34.59
按性別劃分	Female 女性員工	88	100%	5,791	65.81
	Senior Management 高層員工	10	100%	1,170	117.00
By Category 按僱員類別劃分	Middle Management 中層員工	26	100%	2,925	112.50
	Staff 普通員工	443	100%	15,222	34.36

Case: AAG Energy "Fengyi" Training Program for Middle and Senior Management in 2019

AAG Energy launched a "Fengyi" ("to be fully-fledged") training program for middle and senior management in 2019. It organized "Fengyi" classes of upper- and middle-level managers upon even distribution to ensure that the trainees of each class were from various professional backgrounds, and assigned class monitors to improve the learning initiative and ensure the effective implementation of the training. The program had an all-round curriculum covering finance, legal affairs, technology, management, and corporate macro governance. Executives studied management books on a monthly basis in the form of self-study and sharing, and the sharing and discussion were scheduled at the end of the month. In addition, the program led executives to the "front line", to learn in practice on the spot, and to have an intuitive understanding of the management status and the working principles of rigs, pumps, and compressors.

翼計劃| 亞美能源2019年針對中高管開展「豐翼 計劃」,成立高層、中層分佈均匀的「豐 翼」班級,確保學員構成豐富性,並安排

案例:2019年亞美能源中高管培訓「豐

班級管理人員,提升學習能動性,確保 培訓計劃有效開展。「豐翼計劃」從財 務、法務、技術、管理、公司宏觀治理 全方位進行課程設置,高管學員以自學 加分享形式,每月度進行管理類書籍的 學習,在月末組織學習、分享、討論。 此外,「豐翼計劃」帶領高管「下一線」, 走近業務現場實地學習, 近距離地了解 鑽機、泵類、壓縮機專業原理和管理現 狀。



On-site Learning 現場學習



Attending a Lecture 講座學習

Case: Employee Training Course "Result Orientation and Sense of Responsibility" in 2019

On 6 August 2019, AAG Energy entrusted a specialized training institution to conduct the "Result Orientation and Sense of Responsibility" training based on the Company's overall training program and the survey results of previous participants. The training was designed to break through employees' thinking stereotypes and improve their work efficiency. The training institution provided online courses for students to learn by themselves, the training institution also carried out effectiveness evaluations and the average score of employees in this internal training course was 2.67/3 points and employee satisfaction rate was 89%.

案例:2019年「結果導向與責任意識培訓」員 工培訓

2019年8月6日,基於公司培訓計劃以及前期 員工調研結果,亞美能源委託專門培訓機構, 進行「結果導向與責任意識培訓」,旨在打破 員工部分固化思維,提高員工的工作效率。同 時培訓機構提供了線上課程,供學員自行學 習。培訓機構還開展了效果評估,此次內訓員 工平均得分為2.67/3分,員工滿意度為89%。



In-class Employees Training 員工培訓課堂

5.3 Employees Care

AAG Energy cares for every employee, listens to employees' diverse demands and implements humanized management. While realizing the personalized development of employees, it creates a cohesive corporate culture. The Company encourages employees to maintain a healthy work-life balance. In 2019, by organizing various recreational activities as carriers to promote employees' communication and interaction, the Company provided employees with a platform to express themselves and enhance communications with each other. At the same time, through the distribution of benefits and the creation of a warm working environment to improve employee happiness index.

Case: Outreach Training with the Theme of "Forging Ahead with Cohesion and Solidarity"

In order to promote communication among employees, break the barriers of posts and departments, and enhance the team spirit of employees, on 31 May 2019, AAG Energy organized outreach training with the theme of "Forging ahead with cohesion and solidarity". The training covered a wide range of activities, including team building, execution challenge, innovation training, etc., to help employees open up their hearts, quickly integrate into the collective, and encourage reasonable competition to form a mutually reinforcing and mutually supportive team environment. After the successful completion of the outreach training, the Company organized employees to watch video clips about thanksgiving to parents to celebrate Children's' Day in advance. The videos were recorded by the families of employees in advance with the aim of spreading family love and camaraderie among colleagues. That evening was closed with a bonfire party to let steam off the employees and to reward their dedication to the Company.

5.3 關愛員工生活

亞美能源關愛每一位員工,認真聆聽員 工多樣化訴求,實施人性化管理,在 現員工個性化發展的同時,打造富有疑 聚力的企業文化。我們注重員工工作生 活的平衡,2019年組織了豐富多彩於 體活動,以活動為載體促進員工交流 動,為員工提供展示自我、加強溝通的 平台,同時通過發放福利,營造溫馨的 工作環境,提升員工幸福指數。

案例:「凝心聚力、砥礪前行」主題拓展 訓練





AAG Energy's outreach training activities in 2019 亞美能源 2019 年員工拓展訓練活動

5.4 Benefiting Local Communities

Adhering to the concept of integration with local communities, AAG Energy pays close attention to the ecological impact of its own business development on the local communities. AAG Energy complies with national and local laws and regulations such as the Opinions on Improving the Market-oriented Allocation Mode for Industrial Land to Promote Industrial Transformation and Upgrade (《關於完善工業用地市場化配置方 式促進產業轉型升級的意見》), effectively protects the interests of the communities, continuously monitors and evaluate its environmental and safety impacts so as to reduce risks to communities. Over the years, AAG Energy fully committed to consultation and joint contribution with communities and established a community communication management mechanism centered on the Company's Relations Department. involving various stakeholders such as government departments at all levels, village committees, villagers and contractors etc., and implemented throughout the entire production process. Till the end of 2019, our community communication work had covered nearly all villages around the project operation sites.

In 2019, in order to further strengthen the management of community relations, AAG Energy formulated internal systems such as the Compilation of "Management Systems for the Comprehensive Support Department" (《綜合保障部管理制度彙 編》) to clarify the community relationship management structure and management process, and implemented such innovative measures as assigning "one person to one county" and localize communication and coordination personnel. Investigations were conducted regarding environmental pollution, land occupation and other challenges that our business operations may cause to the community, and the complaint and reporting channels are used to ensure that the investigation and compensation process is open, transparent, legal, fair, timely and efficient. In 2019, AAG Energy properly handled community relations, effectively protected the rights and interests of communities, negotiated and coordinated with villagers, community representatives, and the government for a total of 136 times. All community reports and complaints were resolved within 48 hours, ensuring the harmonious coexistence between the Company and the communities and the orderly production and smooth operation in all localities throughout the year.

5.4 社區關懷

2019年,為進一步加強社區關係管理,亞美能源制定《綜合保障部管理制度,與編》等內部制度,明確社區關係管理無構和管理流程,實行「一縣一專員」、滿熟開展對社區可能造成的環境污染、舉,對社區可能造成的環境污染、舉,對社區可能造成的環境污染、舉,對社區,確保調查賠償過程公開透明、發明,發展,切實保障社區權益,以實保障社區權益,以實保障社區權益,以實保障社區權益,以實保障社區權益,以實保管社區權益,以實保管社區權益,以實保管、社區學報及投訴事件全部,其社企和諧共處,實現社企和諧共處,實現社企和諧共處,與計136次,社區學報及投訴事件全部,不穩運營。

Carrying out community projects is an important way for the Company to assume corporate social responsibility and give back to the society and to integrate itself into the local economic, social, and cultural development in order to ensure long-term and stable business operations. In 2019, AAG Energy hired a third-party professional organization to evaluate its community projects. Based on the status of community projects, it built an AAG Energy Community Project Working Model to guide the systematic planning, management, and communication of community projects, thereby forming a community project system with equal emphasis on corporate social responsibility and industry characteristics. The Model guided the Company to actively cooperate with local community planning, to fully match its operations with the development needs of communities, and to ensure the long-term and effective fulfillment of its responsibilities for communities.



Community Working Model of AAG Energy 亞美能源社區工作模型

Adhering to the community development policy of "Sustainable Development, Inclusive Community", in 2019, AAG Energy carried out community projects in a planned manner under the guidance of the community project working model. The Company called on all employees to participate in the joint construction with the community and devote to community dedication so as to create a community featuring a beautiful environment, prosperity, vitality, mutual assistance and inclusiveness and to realize the common growth of enterprise and community. In 2019, the total length of AAG Energy volunteer services was 55 hours.

Supporting people's livelihood with supply guarantee: In response to the government policy of supporting people's livelihood with supply guarantee, AAG Energy supplied CBM to local communities at preferential prices. On the one hand, the supply guaranteed sufficient gas for heating in villages in winter, and on the other hand, it supported the implementation of coalto-gas conversion to change the way residents use energy, thereby helping transform the community's energy structure. In 2019, AAG Energy supplied 276 million cubic meters of gas for the livelihood of Shanxi Province, covering cities and counties such as Qinshui, Yangcheng, Jincheng, Changzhi, Taiyuan, etc., making important contributions to the gasification of Shanxi, while effectively reducing carbon dioxide, sulfide and dust emissions to improve the local air quality so that local residents had a cleaner and healthier living environment. In addition, AAG Energy assisted downstream natural gas suppliers conduct LNG maintenance to eliminate potential safety hazards in equipment and facilities, and helped communities use gas safely.

秉承「可持續發展,包容性社區」的社區發展政策,2019年亞美能源在社區工作模型指導下計劃性地開展社區項目,在公司層面號召全員參與企地共建、盡心於社區奉獻,共創環境優美、繁榮活力、包容互助的社區,實現企業與社區共同成長。2019年,亞美能源志願者服務時長共計55小時。

Contributing to poverty alleviation: As an international energy company, AAG Energy actively integrates itself into the national poverty alleviation strategy by actively supporting and participating in poverty alleviation to contribute its own efforts to poverty alleviation. In 2019, on the arrival of the sixth "Poverty Alleviation Day" in the country, AAG Energy launched a social assistance donation activity with the theme of "poverty alleviation with love and collaboration" in Tuwo Township to support local poverty alleviation and income increase. In addition, based on the local development needs around the project location, AAG Energy fully supported local industrial integration to achieve economic development. It actively aligned itself with the local government's overall idea of "one leading with several supporting" for poverty alleviation, with rural revitalization as the overall goal, relying on the rich historical culture, natural scenery, folklore, industrial foundation, coal and CBM and other resources advantages of Qinshui County to foster and expand advantageous industries. In 2019, AAG Energy helped Dongda and Xida villages of Qinshui County develop tourism resources by virtue of Zhangfeng Reservoir, demonstration ranch, and Dangchuzhuang ecological courtyards. Combining local industries such as apple planting, flower-plant industry, fisheries, poultry farming, and water plants, through promoting investment, attracting talents, etc., AAG Energy helps to develop a new path of integrated development of agriculture, forestry, culture, tourism, and health with Qinshui characteristics.

助力扶貧攻堅:作為一家國際能源公 司,亞美能源主動融入脱貧攻堅大局, 積極支持扶貧、參與扶貧,為扶貧攻堅 貢獻自身力量。2019年,在全國第六個 扶貧日到來之際,亞美能源在土沃鄉開 展了「愛心扶貧攜手同行」社會幫扶捐贈 活動,支持當地脱貧增收。此外,亞美 能源圍繞項目所在地發展需求,全力助 力其產業融合,實現經濟發展。積極配 合政府「一個統領,三五支撐 | 總體思 路,以鄉村振興為總目標,依託沁水豐 富的歷史文化、自然風光、民俗民藝、 產業基礎、煤炭煤層氣等資源優勢,培 育壯大優勢產業。2019年,亞美能源積 極幫助沁水縣東大村、西大村,利用張 峯水庫、示範牧場、當處莊生態小院等 開發旅遊資源,結合當地蘋果种植、苗 木花卉、漁業、養雞、水廠等產業,通 過招商引資、吸引人才等方式促進產業 融合,為走出一條發揮沁水特色的農林 文旅康發展新路徑助力。



AAG Energy at the donation and assistance offering ceremony in Tuwo Township 亞美能源向土沃鄉進行幫扶捐贈

Caring for the vulnerable groups: AAG Energy places emphasis on social welfare and care for vulnerable groups. In 2019, the Company organized visits to nursing homes and social assistance stations on the occasion of the Spring Festival, Dragon Boat Festival, and Mid-Autumn Festival, bringing festive greetings and joy to the elderly, and donated food such as rice, flour, oil, vegetables, and seasonal clothing as a love dedication of the Company.

關懷弱勢羣體:亞美能源注重社會福利 事業,心繫弱勢羣體。2019年,亞美能 源在春節、端午、中秋佳節之際組織慰 問了敬老院、社會救助站等,為老人帶 來節日的問候和歡樂,並捐贈米、面、 油、蔬菜等食品和當季衣物等物資,貢 獻公司的一份愛心。



AAG Energy in a Visit to a Nursing Home 亞美能源探訪敬老院

Constructing Spiritual Civilization: AAG Energy cooperated actively with local government departments in constructing spiritual civilization to promote the harmonious development of government and the Company. In 2019, AAG Energy participated in a gala to celebrate the 70th anniversary of the founding of the People's Republic of China, where poetry recitations and other performances were performed by the employees to show the enterprise spirits. In the "Spring Festival" and the "Lantern Festival" — two festivals Qinshui people hold dear — AAG Energy actively participated in the preparation for a light show event and invested for the construction of a splendid light show booth, creating a festive atmosphere and bringing joy to the people of Qinshui.

建設精神文明:亞美能源積極配合當地政府部門的文化建設工作,促進政企和諧發展。2019年,亞美能源參加慶祝中華人民共和國成立70週年文藝匯演,員工表演了詩歌朗誦等節目,展示了企業風貌;在沁水人民喜愛的「春節」「元宵」兩節,亞美能源積極參与籌備燈展活動,投資籌建了大型燈展展台,為活動營造了良好氛圍,為沁水老百姓帶來歡樂。



AAG Energy in the Gala to Celebrate the 70th Anniversary of the Founding of the People's Republic of China 亞美能源參與當地中華人民共和國成立70週年文藝匯演



AAG Energy in the Large-Scale Light Show for the "Spring Festival" and the "Lantern Festival" 亞美能源投資籌建「春節」「元宵」兩節大型燈展展台

	Environmental, Social & Governance Indicator for Disclosure 環境、社會及管治指標		Disclosure Plan & Notes 露計劃與説明
Enviro 環境	nment		
Gener Inform emiss hazarc (a) f (b) (一般披 有關廢 (a) ī	missions 排放物 al Disclosure: ation that have a significant impact on the issuer related to air and greenhouse gas ons, discharges into water and land, and generation of hazardous and nonous waste: Policies; and Compliance with relevant laws and regulations 「露: 「氣及溫室氣體排放,向水及土地的排污、有害及無害廢棄物的產生等的: 故策;及 遵守發行人有重大影響的相關法律及規例的資料	3.2	Creating Clean Environment 共創綠色環境
A1.1	The types of emissions and respective emissions data. 排放物種類及相關排放數據。	3.2	Creating Clean Environment 共創綠色環境
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)。	3.2	Creating Clean Environment 共創綠色環境
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)。	3.2	Creating Clean Environment 共創綠色環境
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)。	3.2	Creating Clean Environment 共創綠色環境
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。	3.2	Creating Clean Environment 共創綠色環境
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。	3.2	Creating Clean Environment 共創綠色環境

	Environmental, Social & Governance Indicator for Disclosure 環境、社會及管治指標		Disclosure lan & Notes 露計劃與説明
資源 General E Policies o 一般披露	of Resources 原使用 Disclosure: In the efficient use of resources, including energy, water, and other raw materials. : 資源(包括能源、水及其他原材料)的政策。	3.2	Creating Clean Environment 共創綠色環境
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)。	3.2	Creating Clean Environment 共創綠色環境
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)。	3.2	Creating Clean Environment 共創綠色環境
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。	3.2	Creating Clean Environment 共創綠色環境
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。	3.2	Creating Clean Environment 共創綠色環境
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	
環境 General E Policies of resources 一般披露		3.2	Creating Clean Environment 共創綠色環境
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。	3.2	Creating Clean Environment 共創綠色環境

	Environmental, Social & Governance Indicator for Disclosure 環境、社會及管治指標	_	Disclosure lan & Notes 露計劃與説明
Social 社會			
僱傭 General D Information dismissal, diversity, a (a) polic (b) com 一般披露 有關薪酬 及福利的 (a) 政策	pisclosure: on that have a significant impact on the issuer relating to compensation and recruitment, and promotion, working hours, rest periods, equal opportunity, anti-discrimination, and other benefits and welfare: cies; and pliance with relevant laws and regulations: 及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇	5.1	Respecting Employees' Rights and Interests 尊重員工權益
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。	5.1	Respecting Employees' Rights and Interests 尊重員工權益
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。	5.1	Respecting Employees' Rights and Interests 尊重員工權益

	Environmental, Social & Governance Indicator for Disclosure 環境、社會及管治指標		Disclosure lan & Notes 露計劃與説明
健康 General D Information environme (a) polic (b) com 一般披露 有關提供等 (a) 政策	on that have a significant impact on the issuer related to providing a safe working ent and protecting employees from occupational hazards: cies; and pliance with relevant laws and regulations	3.1	Continuous Safe Operation 持續安全運營
B2.1	Number and rate of work-related fatalities. 因工作關係而死亡的人數及比率。	3.1	Continuous Safe Operation 持續安全運營
B2.2	Lost days due to work injury. 因工傷損失工作日數。	3.1	Continuous Safe Operation 持續安全運營
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。	3.1	Continuous Safe Operation 持續安全運營
發展 General D Policies o Descriptio 一般披露	on improving employees' knowledge and skills for discharging duties at work. on of training activities.	5.2	Supporting Employee Development 助力員工發展
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。	5.2	Supporting Employee Development 助力員工發展
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。	5.2	Supporting Employee Development 助力員工發展

	Environmental, Social & Governance Indicator for Disclosure 環境、社會及管治指標		Disclosure lan & Notes 露計劃與説明
勞工 General D Informatic labour: (a) polic (b) com 一般披露 有關防止i (a) 政策	on that have a significant impact on the issuer related to preventing child and forced cies; and pliance with relevant laws and regulations	5.1	Respecting Employees' Rights and Interests 尊重員工權益
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。	5.1	Respecting Employees' Rights and Interests 尊重員工權益
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。	5.1	Respecting Employees' Rights and Interests 尊重員工權益
供應 General D Policies or 一般披露	n managing environmental and social risks of the supply chain.	4.3	Supporting Suppliers to Grow Together 供應商共同成長
B5.1	Number of suppliers by geographical region. 按地區劃分的供貨商數目。	4.3	Supporting Suppliers to Grow Together 供應商共同成長
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。	4.3	Supporting Suppliers to Grow Together 供應商共同成長

	Environmental, Social & Governance Indicator for Disclosure 環境、社會及管治指標	Disclosure Plan & Notes 披露計劃與説明
產品 General D Informati advertisin methods (a) poli (b) com 一般披露 有關所提((a) 政策	on that have a significant impact on the issuer related to health and safety, g, labeling, and privacy matters relating to products and services provided and of redress: cies; and pliance with relevant laws and regulations	4.1 Consistently Stable Supply of High-Quality Gas 持續高質穩定供 氣
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。	Not applicable 不適用
B6.2	Percentage of total products sold or shipped subject to recalls for safety and health reasons. 接獲關於產品及服務的投訴數目以及應對方法。	4.1 Consistently Stable Supply of High-Quality Gas 持續高質穩定供 氣
B6.3	Description of practices relating to observing and protecting intellectual property rights. 描述與維護及保障知識產權有關的慣例。	4.1 Consistently Stable Supply of High-Quality Gas 持續高質穩定供 氣
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。	Not applicable 不適用
B.6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored. 描述消費者資料保障及隱私政策,以及相關執行及監察方法。	Not applicable 不適用

	Environmental, Social & Governance Indicator for Disclosure 環境、社會及管治指標		Disclosure Plan & Notes 露計劃與説明
反貪 General C Informatic and mone (a) poli (b) com 一般披露 有關防止! (a) 政策	plisclosure: on that have a significant impact on the issuer related to bribery, extortion, fraud, by laundering: cies; and pliance with relevant laws and regulations	4.2	Integrity and Compliance 堅守誠信合規
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。	4.2	Integrity and Compliance 堅守誠信合規
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。	4.2	Integrity and Compliance 堅守誠信合規
社區 General D Policies o issuer ope 一般披露	n community engagement to understand the needs of the communities where the erates and to ensure its activities take in to consideration the communities' interests.	5.4	Benefiting Local Communities 社區關懷
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)。	5.4	Benefiting Local Communities 社區關懷
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)。	5.4	Benefiting Local Communities 社區關懷

Feedback 讀者意見反饋表

Dear Reader:

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

- Are you satisfied with this report? Please feel free to share your comments.
- 2. Does this report give you full visibility on our CSR platform?
- 3. Are you able to find the information that you were seeking in this report?
- 4. 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

You can mail the above information to:

Contact: AAG Energy Holdings Limited

Address: Panzhuang Management Center, GuoBei Village Jiafeng Town, Qinshui County, Jincheng, Shanxi, P. R. China 048204

Tel: 0356-8068666

We will give full consideration to your opinions and suggestions, and promise to properly protect your information from the third party.

您可以將以上信息郵寄至:

收件方:亞美能源控股有限公司

地址: 山西省晉城市沁水縣嘉峯鎮郭北村潘庄 管理中心, 048204

聯繫方式:0356-8068666

我們將充份考慮您的意見與建議,並承諾妥善 保護您的上述信息不被第三方獲取。



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