



亚洲水泥(中国)控股公司 Asia Cement (China) Holdings Corporation

1									
	Overview	PART ONE			Environmental Educatio	n		53	
	About the Report		03		5.1-Greenery Cultivation			53	
	Operator Words		04		5.2-Jiangxi Yadong's Agricult	ural Park		54	
					Sustainable Gove	rnance			0
	 Mission, Vision and Sustain 	hability Strategies	05		Circulation	1	PART THREE		0
	 Sustainable Development of 	Goals in 2021	07						
	 CSR Performance Highlight 	s of 2020	08	•	Corporate Governance			56	Z
	Cus on Custoinekle				1.1-Corporate and Governar			56 63	-
	Green Sustainable Circulation	PART TWO			1.2-Products and Economy F			67	
	Circulation				1.3-Climate Change Adaptat	-		70	
	Sustainable Mines		11		1.4-Supply Chain Manageme	ent		70	Z
	1.1-Digitised Mining		12		1.5-Customer Service			74 76	-
	1.2-Mining Control and Min	ne Safety	14	•	Happy Workplace 2.1-Employee Structure			77	10
	1.3-Re-vegetation in Mines		17		2.2-Welfare Competitiveness			78	
	1.4-Sustainable Planning for	or Mines	21		2.3-Capacity Competitiveness			83	
	1.5-Employment and Comr	nunication of Local Residents	23		2.4-Occupation Safety and He			85	
	Low-carbon Green Int	elligent Manufacturing	25		2.4-Occupation Salety and R	earth			
	2.1-Low-carbon Green Lead	dership	26	•	Sustainable Topics Man	agement		93	
	2.2-Cement 4.0 Measures		27		3.1-Sustainable Topics Identi	fication		93	
	2.3-GHG and Energy Manag	gement	28		3.2-Evaluation and Negotiation	on of Stakeholders		95	
	2.4-Water Resource Manag	gement and Pollution Prevention	34		3.3-Management and Disclos	ure of Significant Topi	cs	97	
					3.4-Sustainable Topic Validat	ion and Report Manag	gement	98	
	 Recycling Economy 3.1-Recycling Economy Val 	ue Chain	44 45	•	Sustainable Action Initia	ative		99	
	3.2-Use of Raw Materials a		45		4.1-Disclosure of Projects and	d Indicators on Sustain	able Mine	99	
	3.3-Wastes Disposal	nu Lifeigies and Resources	40		4.2-ISO 26000 Social Respons	sibility Guidelines	1	100	
	3.3-Wastes Disposal		47		4.3-Environmental, Social and Guidelines(ESG)	d Governance Reportir	ng	101	
	Social Care		48		Guidelines(ESG)				
	4.1-Local Communities and	l Vulnerable Care	49		Appendix	PART FOUR	2		-
	4.2-Support to Education U		51		GRI Guidelines Content	Index : General St	andard		
	4.3-Humanistic Science Edu	ucation	52		Disclosure	index . General 30	1	103	
	4.4-Social Care Expenditure		52	•	GRI Guidelines Content Disclosure	Index : Specified S	tandard 1	104	





Overview PART ONE





Dear Readers

This report used the framework of Global Reporting Initiative(GRI) 2016. It's based on the [Comprehensive] options. In addition, the report compliance with relevant international guidelines and standards, including: ISO 26000 Social Responsibility Guidelines and Environmental, Social and Governance Reporting Guidelines(ESG), and to provide reliable public information for readers.

The Architecture and Value Chain Integration

On the basis of combining Asia Cement (China)'s business and implementing the reporting principles, this report responses to the topics concerned by various parties, and present our effort put into economic, social and environmental aspects through the green sustainable circulation and sustainable governance circulation, integrate the Asia Cement (China) value chain synergy. In a view to show stakeholders our commitment.

Implementation of Stakeholders Engagement

Asia Cement (China) actively undertook its corporate social responsibilities to meet the expectations of the society at large in 2020. We formulated an integrated communication strategy, implementing a comprehensive and instant communication approach to actively engage face-to-face communication with local residents and give prompt assistance on various matters. In addition, we have established communication and feedback mechanisms in the form of online and communities to integrate communication and engagement with stakeholders virtually and physically. We expect to enhance trust and dependence between people.

Report Scope

This report mainly provides the corporate sustainable management and performances in material operation sites of Asia Cement (China) from 1 January 2020 to 31 December 2020. The additional information of the domestic physical operating companies disclosed includes: Jiangxi Yadong, Huanggang Yadong, Nanchang Yadong, Nanchang Yali, Jiangxi Yali, Yangzhou Yadong, Taizhou Yadong, Hubei Yadong, Wuhan Yaxin, Wuhan Yadong, Wuhan Yali, Hubei Yali, Sichuan Yadong, Sichuan Lanfeng, Sichuan Yali, Chengdu Yali, Sichuan Yali. The financial statement is published after being certified by the certified public accountant. Parts of the Chart are quoted from the annual report, government sectors, and the public information disclosed on the relevant websites and is presented in the conventional manner. Exceptions will be elaborated in the contents of the report.

It is the seventh year to issue this report, and the previous issuance date is June 2020. This report is issuedonce a year and the expected issuance date next time will be May 2020.

Interpretation

For the purpose of expression, in this report, "Asia Cement (China) Holdings Corporation" is also referred to as "Asia Cement (China)", "the Company" or "We".

Contact Us

Address: No.6 Yadong Avenue Ma-Tou Town, Ruichang City Jiangxi Province. Company Website: <u>http://www.achc.com.cn/</u> Liaison: Wu Shen Hsin Tel: 0792-4888999#6027 Fax: 0792-4886998 Email: <u>wushengxin@achc.com.cn</u> CSR Feedback and Complaint Box: <u>achc@achc.com.cn</u>

(If you have any opinion or suggestion, you are welcome to contact us.)



2020企业社会责任报告 corporation social report

About the Report

Overview

Operator Words

Sustainability Strategies Green Sustainable Circulation

Mission, Vision and

Sustainable Governance

Sustainable Development Goals in

2021

Appendix

CSR Performance Highlights of

03



Asia Cement (China) Holdings Corporation (the "Company") embraces our corporate culture of "Integrity, Diligence, Austerity, Prudence and Innovation". To achieve "High Quality, High Efficiency, a High Level of Environmental Protection, and Low Cost", the Company seeks development through innovation to maintain momentum and serve as a role model for the cement industry in the face of changes across external environment and industrial structure. The Company insists on integrating social responsibilities into the business operations, development strategy and core values, and adheres to the mission of being the partner of choice in creating sustainable and green homes. In light of economic, environmental and social sustainability issues, the Company constantly pursues corporate development Company strives to coordinate and unify corporate development with employee growth, ecological and

environmental protection, resource utilisation and social harmony. Fulfilment of social responsibility is viewed as an important measure for sustainable development and enhancement of core competitiveness.

In 2020, Asia Cement (China) deepened the "green sustainable cycle" and the "sustainable governance cycle", comprehensively promoted sustainable development, and given back to shareholders and society through practical actions and outstanding performance. In the face of the towering challenges of the COVID-19 epidemic, the Company promptly supplied cement needed for hospital construction, and donated materials and funds to fight against the epidemic. Each factory area strictly, carefully, and painstakingly followed epidemic prevention measures, while cooperating with the government plan to actively resume work and production, in order to minimise the impact of the epidemic. Our operating efficiency achieved an overall rebound in the second half of the year. We donated more than 10 million RMB in materials and funds throughout the year.

Green Sustainable Cycle The Company actively promotes technological innovation, with the construction of digitised and green mines. In 2020, we invested approximately 52,860,500 RMB to build national-level green mines. Among them, two mines under the jurisdiction of Jiangxi Yadong were announced to have been selected for the 2020 "National Green Mine" list. After being selected for the "Hubei Province Green Factory List" and the "National Green Mine List" in 2019, Huanggang Yadong was successfully chosen for inclusion in the national "Fifth Green Factories List" in 2020. In addition, the Company continues to promote the low-carbon, green and intelligent manufacturing of cement, while upgrading technology and equipment. This serves to continuously control and reduce pollutant emissions, to save energy and reduce consumption. The Company has comprehensively upgraded and reconstructed the desulphurisation and denitrification systems of all production kiln lines, and constructed the electric-to-bag-dustcollection project. This has effectively controlled the emission of nitrogen oxides and dust and resulted in emission levels well below the national standards. The waste heat power generation system is available for all of our cement companies. This can dramatically keep down the electricity consumption of cement plants and greatly reduce production costs and carbon dioxide emissions.

Operator Words

Green Sustainable Circulation

We achieved clear benefits in energy saving and environmental protection. At the same time, we increased investment in environmental protection projects. Through the green development strategy of combining cement production and co-processing, we expanded to coprocess soil contaminated with heavy metal, industrial hazardous waste, and medical waste. This was based on co-processing municipal solid waste in cement kilns to reduce fossil fuel consumption and improve the utilisation rate of industrial waste residues. Meanwhile, we coordinated pollutant disposal with the reduction of greenhouse gas emissions, which significantly reduced emissions of wastewater, waste residues, waste gas and carbon dioxide.

Sustainable Governance Cycle Based on the sustainable development strategy of "creating a happy workplace, supporting disadvantaged groups, cultivating cultural heritage, and creating an inclusive society", the Company pays attention to employee health and safety and strengthens personnel training. In response to the rapid changes in the domestic market environment, the Company has adjusted human resource deployment and implemented organisational changes, by implementing the "young and local" policy to recruit a professional and efficient management team. In terms of manpower development, we strengthen colleagues' professionalism while cultivating international talents and creating diversified capabilities through a rotation mechanism. The Company enhances its overall competitive advantage by enriching innovative technological knowledge with a complete and systematic training method to cultivate high-quality human assets. The Company actively invests in ongoing social consideration, attaches importance to the safety and rights of local residents, and continues to implement the mechanism for local feedback. To be welcomed by local governments, enterprises and residents, we coexist and prosper by actively integrating into the local culture and enthusiastically participating in public welfare undertakings.

As 2021 is the first year of the "14th Five-Year Plan" period, the government continues to deepen supply-side reforms and optimise the industrial structure. The construction industry has also entered a stage of green and high-quality development, which can simultaneously promote the healthy development of the cement industry. As the adverse effects of the coronavirus epidemic gradually weaken, the cement industry will continue to maintain a healthy and stable development trend in 2021.

In the future, the Company will continue to make up for shortcomings in energy efficiency, environmental protection, safe production, green mines, occupational disease prevention, etc., while continuing to invest in sustainable development actions to build "environmentally friendly, resource-saving" smart factories and create commercial and social value. We strive to move towards the goal of "being suitable for business and good for mankind".



 \leftarrow

Overview

About the Report

Sustainable Governance

Mission, Vision and Sustainability

Strategies

2021

CSR Performance Highlights of 2020







Sincerity Sincerity with faith, exert the spirit of teamwork.

Diligence Diligence with devotion, make efficient operation.

Thrift Thrift with humble attitude, execute the duty realistically.

Prudence

Prudence with consideration, pay attention to the personnel and property safety.

Innovation

2020企业社会责任报告 corporation social report

> For years, the employees follow this model. This has become the corporate spirit of Asia Cement (China). President Hsu expects the employees to be "clean and clear with final analysis until done". He also emphasizes to increase the service quality and emphasis on the efficiency so that Asia Cement (China) may grow sustainably.

About the Report Overview

创新

06

Mission, Vision and Sustainability Strategies

Operator Words

Green Sustainable Circulation

Sustainable Development Goals in 2021

Appendix

CSR Performance Highlights of 2020

Sustainable Governance

Sustainable Development Goals in 2021

Major Issues	Sustainable Solutions	2020 Actual Performance	2021 Annual Target
Sustainable Mines	8 Disclosure Items and Indicators	Set 8 indicators for self-assessment in 2020, centreing on DZ/T 0318-2018 Green Mine Construction Specification of Cement Limestone Industry; to implement the development concepts of: innovation, coordination, green, open, and sharing; to realise comprehensive, overall development in resource utilisation, energy saving, emissions reduction, environmental protection, land reclamation and harmony between enterprises and land across the whole process of mining resources. We have achieved the target of 100% in 2020.	Continuously promote and optimise mine production automation systems and, through the development of communication technology, control and connect production and monitoring subsystems in a centralised and data-rich way, and also invest into the pilot mine test on the basis of the goal set in 2020.
	Build a green energy management centre for energy conservation and emissions reduction.	Jiangxi Yadong is preparing to build an energy management centre to continuously promote energy conservation and emissions reduction.	Complete energy management goals and reduce the comprehensive power, coal, energy, and water consumption of products at each cement plant.
	Build a national green factory.	Huanggang Yadong passed the national green factory review.	Promote the construction of green factories by various cement companies.
Low-carbon process and smart manufacturing	Achieve carbon peak and neutrality goals.	Investigate and evaluate carbon peak and neutrality.	Actively study CO_2 emission reduction and carbon neutralization solutions per unit of cement and clinker products. Promote the co-processing of waste in cement kilns and the use of alternative fuels to reduce CO_2 emissions.
	Build a smart factory.	Realise automatic and intelligent raw mix proportioning and online detection of cement particles.	Promote the automated laboratory program; the coal mining, production and retention integrated intelligent management and control system; the predictive maintenance system, and the online superior product analysis system for large reducers.
(S) Recycling Economy	Increase the proportion and types of wastes that replace raw fuels and reduce mining areas, to achieve waste recycling and form an industrial circular economic chain.	Make use of about 5.45 million tons of industrial waste. The cement kilns co-processed a total of 67,888 tons of solid waste, such as domestic sludge and drilling cuttings, and co-processed 17,518.7 tons of solid waste fuel rods as alternative fuels.	Reach 100% disposal rate of waste generated in the cement production process. Realise incineration of all Company domestic waste in the kiln. We have been exploring the types of waste that may be processed, so that the proportion of alternative raw fuels increases year by year.

 About the Report
 Operator Words
 Mission, Vision and Sustainability Strategies
 Sustainable Development Goals in 2021
 CSR Performance Highlights of 2020
 O7

 Overview
 Green Sustainable Circulation
 Sustainable Governance Circulation
 Appendix

Sustainable Mines

- Two mines of Asia Cement (China) were announced to pass the screening list of 2020"National Green Mine".
- RMB52.8605 million was invested to promote digital technology and green mines.
- 60.9 hectares of mines went through reclamation, and planted 20,380 saplings and 8,820 kg of grass seeds.
- Negotiation and communication took place with local residents. In 2020, we had a total of 9 communication sessions with 75 local residents.

Recycling Economy

- In 2020, a total of 5.45 million tons of industrial waste residue have been used.
- Treating solid waste to produce fuel rods, which are used as replacing fuel in cement kilns. A total of 17,518.7 tons of fuel rods and 24,772.91 tons of solid wastes were landfilled and sorted by cement kilns, so as to reuse industrial wastes.



Social Care

- Our Employee Care Education Fund sustained its support to Yadong Hope Primary School.
- Our social stability expenditure amounted to RMB11.87 million.
- We continued to care for underprivileged groups and actively engage in charity activities
- We promoted industry-academy internships, in a bid to identify and provide talents for our society.

Low-carbon Green Intelligent Manufacturing

- ➢ GHG emission intensity was controlled under 0.9, with a CO₂ emission intensity of 0.88 in 2020.
- A net amount of 612,005 MWh of electricity was generated from residual heat recovery, with the proportion of residual heat power generation reaching 28.1%.
- We invested approximately RMB49.277 million in pollution control and prevention.
- Save a subtotal of 6.447 million kWh of electricity consumption through replacement and modification of equipment. This is equivalent to a reduction of 3,933 tons of CO₂ emissions. In terms of process improvement, Jiangxi Yadong saved 8.988 million kilowatt-hours of electricity and 4,659 tons of standard coal by using raw material additives. In addition, it also saved 3,003 tons of standard coal through incineration of solid waste. Sichuan Lan Feng used the "Skyscraper" brand grinding aids to save 7.617 million kilowatthours of electricity and 133,298 tons of clinker consumption. Wuhan Yadong saved 17,073 tons of clinker consumption by using the "Skyscraper" brand grinding aids.

About the Report

Operator Words Mission, Vision and Sustainability Strategies

Sustainable Governance

Sustainable Development Goals in CSR Performance Highlights of 2021

Appendix

Green Sustainable Circulation

Corporate Governance

- In 2020, the distributable earnings per share (EPS) of Asia Cement (China) was 1.703 RMB. The board of directors recommended a cash dividend of 0.511 RMB (the proposed final dividend for the year must be approved by the Company's shareholders at the forthcoming annual general meeting), with the dividend ratio reaching 30%...
- The return rate of customer satisfaction survey sample conducted was 100% and the customer satisfaction score was 96 points.
- In 2020, the Company upgraded its mobile app several times, optimising several functions for customers (such as ordering and inquiry), to provide customers with fast, convenient and secure services.

Action Initiative

- Asia Cement (China) customized 8 Disclosure Projects and Key Performance Indicators for sustainable mines, the target achievement rate is 100%.
- Asia Cement (China) has joined ISO 26000 Corporate Social Responsibility Guidelines and Environmental, Social and Governance Reporting Guidelines(ESG), to deepen green production promote sustainable development.



Happy Workplace

- In 2020, the Company contributed 364,000 RMB in total to establish a comprehensive training system. It can reserve more professional talents for the Company
- Asia Cement (China) provides a safe and healthy workplace for its employees and carries out irregular safety inspections. We tailor-made "threelevel safety education training" for the contractor's staff.
- In order to make Company salaries better than local and industry standards, we adjusted the whole salary system in 2020. This raised the salary of all employees by 22%, an increase totalling more than 38 million RMB.



About the Report	Operator Words	Mission, Vision and Sustainability Strategies	Sustainable Development Goals 2021	in	CSR Performance Highlights of 2020
	Overview	Green Sustainable Circulation	Sustainable Governance Circulation		Appendix





Green Sustainable Circulation PART TWO

01



①Low-carbon Green Leadership ②Cement 4.0 Measures 3GHG and Energy Management (4) Water Resource Management and **Pollution Prevention** Low-carbon Green Intelligent

Manufacturing

02

Recycling Economy

①Recycling Economy Value Chain ②Use of Raw Materials and Energies and Resources ③Wastes Disposal

03

(1)Local Communities and Vulnerable Care ②Support to Education Undertakings **③**Humanistic Science Education 4 Social Care Expenditure

Social Care

04

Environmental

①Greenery Cultivation ② Jiangxi Yadong's Agricultural Park

05

Education

Overview

Sustainable Mines



Sustainable Mines--Management Policy

Pursuant to the Opinions on Accelerating the Construction of Green Mines (Guo Tu Zi Gui [2017] No.4) (国土资源部《关于加快建设绿色矿山的实施意见》(国土资规〔2017〕4 号)) and the Specification for Construction of Green Mines of Cement Limestone (《水泥灰 岩绿色矿山建设规范》) (DZ/T0318-2018), Asia Cement (China) carried out a new mining development model for its mines which fit into the requirements for ecological civilization. The model works on six aspects, namely, the environment of the mining areas, resource development methods, integrated resource utilization, energy saving and emissions reduction, technological innovation and digital mines, corporate management and image. Under the model, green mine construction plan and implementation solutions are prepared according to the characteristics of each mine and carried out accordingly, to promote reasonable resource utilization, energy saving and emissions reduction, protection of the ecological environment and harmony between mines and land. Ultimately, the model is designed to coordinate and balance the economic, ecological and social benefits of resource development.

Specific commitments

Our mining areas demonstrate standard and clean environment, as we utilize resources reasonably, protect and restore the ecological environment of the mining areas, establish modern digital mines and build the positive image of a mining enterprise.

Evaluation Methods

In accordance with the "Notice on Well-preparation for the Selection of Green Mines in 2020 (关于做好2019年度绿色矿山遴选工作的通知)" issued by the Ministry of Natural Resources, the procedures include:

- 1.Self-assessment by mines: Perform self-assessments in accordance with the requirements of green mine construction and industry standards.
- 2. Evaluation by third parties: Entrust enterprises and institutions, social organisations or professional evaluation agencies with independent legal personnel to conduct on-site inspections of mine construction and compile third-party evaluation reports.

Low-carbon Green Intelligent

Circulation 1

Manufacturing Green Sustainable Recycling Economy

Sustainable Governance

3. Submit a report for review after governmental random inspections.

Sustainable Mines

Overview



2

3

Specific Actions and Initiatives:

Prepare the Overall Implementation Plan for Green Mine Construction:

Before June 5, 2020, Jiangxi Yadong completed the Overall Implementation Plan for Green Mine Construction of Xinwutian Limestone Mine and the Overall Implementation Plan for Green Mine Construction of Xiazhang Limestone Mine, and submitted them for pre-applications.

Project Tracking:

Tracking system is introduced in the headquarters of Asia Cement (China) to trace the project implementation situation and is reported during the monthly operation meeting at the headquarters.

Self- assessment and Third-party Evaluation of the Mine:

Jiangxi Yadong completed the self-assessment report on the construction of the Xinwutian limestone mine and the green mine construction of the Xiazhang limestone mine in June 2020.

Government Review:

Including on-site inspections and submitted materials, Xinwutian and Xiazhang Cement Limestone Mines of Jiangxi Yadong passed the on-site assessment and acceptance by a third party of Jiangxi Mining Federation on August 26, 2020, and passed the pre-application on September 21, 2020. The third-party evaluation was completed in the system on September 25, 2020.

Public Notice for the Annual Selection:

On September 30, 2020, the Department of Natural Resources of Jiangxi Province completed their review and made recommendations to the Ministry of Natural Resources. On December 29, 2020, the Ministry of Natural Resources announced the 2020 national green mine selection list. A total of 302 mines across the country were selected and announced over a week. Of these, 2 mines under Asia Cement (China) were publicised and approved, namely Jiangxi Yadong Xinwutian Cement Limestone Mine and Xiazhang Cement Limestone Mine. They were officially announced by the Ministry of Natural Resources on January 11, 2021.

Annual Reporting for the Implementation:

Asia Cement (China) prepares the corporate social responsibility report each year for the public to disclose its implementation progress.

_{____

Social Care Environmental Education

Appendix

Sustainable Mines

CSR 2020企业社会责任报告 corporation socia<u>l report</u>

Sustainable Mines—Objective and future Action

Objective

The Company originally planned to complete the list of green mines at or above the provincial level by the end of 2020. Current completion is that in 2019, a total of 4 mines were selected as national-level green mines, namely Jiangxi Yadong (Matou Limestone Mine) and Huanggang Yadong (Benjishan Limestone Mine, Yuanyishan Limestone Mine and Zhongjianwan Sand Shale Mine); in 2020, a total of 2 mines were selected as national-level green mines, Xinwutian Cement Limestone Mine and Xiazhang Cement Limestone Mine of Jiangxi Yadong. Due to undecided selection criteria for green mines below the national level, the original goal of completing the assessment of green mines above the provincial level by 2020 has not been achieved.

Future Action

- 1. Continue to maintain the level and strengthen construction of the mines that have been selected as national-level green mines.
- 2. Continue to construct mines that have not yet been selected in accordance with green mine construction standards.
- 3. Plan for Sichuan Yadong (Wuniuping Limestone Mine) to participate in the green mine selection in 2021.
- 4. Plan for Jiangxi Yadong (Huawu Integrated Sandstone Clay Mine and Bao'anshan Clay Mine) and Sichuan Yadong (Tazishan Sand Shale Mine) to participate in the green mine selection in 2022. The future goal is to complete the assessment of government-certified green mines for those of the Company in 2022.



Sustainable Mines

1.1 Digitised Mining

Vision link:

Aided by the development of 5G and Internet of Things technology, focus on data applications to build timely management, data-driven decision and decision analysis systems layer by layer, to finally achieve optimised operations for mine production with fewer personnel.



Structural logic of the timely management system

- ① Convert the existing manual reporting system into an automatic information input and storage system; combine it with existing automatic information equipment (crusher system, belt scale).
- ② Minimize the use of sensor devices and focus on their long-term reliability.
- 3 Directly generate, collect and store basic production data, and reduce human amendments.
- Integrate various production data and generate diverse management reports, according to demand.
- (5) Change production control to remote, centralised control. This stage is mainly for managers and operators, who are familiar with manual production management, to switch to automatic collection of production information and convey production information to all management levels in a timely manner.

Recycling Economy Green Sustainable Circulation 1

Manufacturing

Overview

Stage

Social Care Sustainable Governance

Appendix

Environmental Education

Digitised Mining



History of digital mine planning for Asia Cement (China) subsidiaries.



Structural logic of the optimised judgement system

- 1. Extend the first-stage functions and analyse first-stage data in an integrated manner.
- 2. Adopt customized special trend analysis.
- 3. Conduct cross-functional group analysis.
- 4. Convert and receive existing mobile device hardware perception system interfaces. Based on collected data from the first stage, this stage conducts a single or cross-item integrated analysis to provide judgements for managerial decision-making.

最佳化判断系统之架构逻辑

Sustainable Mines

Overview

- ່ວ Stage 3
- 1. Collect historical data and analyse future trends.
- 2. Optimise analysis across production processes.
- 3. Install 5G communication systems, road sensing and image analysis equipment to increase positioning accuracy.
- 4. Introduce unmanned mobile equipment. This is the final stage in achieving the goal of optimised operations for mine production with fewer personnel.

-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 1

Recycling Economy

Sustainable Governance

visualization system

Project

Progress

At present, Jiangxi Yadong and Huanggang Yadong have built five sets of modules. These include the real-life 3D visualization system, green mine information entry system, environmental monitoring system, integrated comprehensive remote monitoring system for mines and mine IoT data receiving centre. The 3D visualisation system module provides a visual display of the mines, comprehensively presents production information of the mining area, reclamation and greening and so on; in the second half of 2020, China Mobile built two base stations in the Sichuan Yadong Mine so that the 4G network can fully cover the entire mine.

Sichuan Yadong has planned to start construction of the first-stage timely management system in the first half of 2021. This includes the real-time 3D visualisation system, environmental online monitoring system, intelligent video monitoring system, production information management system, electronic production scheduling system, output measurement system, oil supply management system, equipment health module and other modules; these are expected to be completed by the end of 2021. Jiangxi Yadong and Huanggang Yadong plan to begin the first phase of the timely management system at the end of 2021.



Social Care Environmental Education

Appendix

CSR 2020企业社会責任报告 corporation social report

1.2 Mining Control and Mine Safety

Huanggang Yadong and Jiangxi Yadong has built a live scene 3D visualization system module provides the visualization display of mines, which comprehensively displays the details of mines such as production information, restoration and greening and Environmental monitoring (dust, noise). 3D analysis and measuring tools can reduce the measurement workload during production. The accuracy of the model elevation and horizontal measurement is better than 10cm/pixel, which can achieve 1:500 accuracy in ratio and improve work efficiency. The live scene 3D system is constructed to display data in a 3D scene, such as mines' location, mine boundaries, videos, outputs, vehicle satellite positioning, mining rights, cross-boundary alert and cross-boundary record. Through remote video monitoring, the management personnel of the mines can conduct real-time management and control over material sessions such as mining, processing and production, thereby realizing remote command and promoting the production safety of the mines. The installation of video surveillance systems at key locations of the enterprise, such as maintenance areas, living areas, and oil depots, provides robust protection for property safety of the mining enterprises and reduces the occurrence of thefts and damages. Green mine data input module can achieve green mine planning and publicity effect. Every environmental online monitoring point built by the mine can dynamically monitor environment parameters such as dust (PM2.5, PM10) and noise in real time and display them on a large outdoor display screen.



Sustainable Mines

Integrated remote control system

Online monitoring of the Jiangxi Yadong mine environment



All the mines of the Company have adopted Orica high-precision detonators for long-hole blasting on a hole-by-hole basis, which can effectively control the impact of noise, dust and vibration generated by blasting. Sichuan Yadong introduced digital electronic detonators with higher safety standards, which improved the blasting effect under a complex blasting environment. Its detonation system and control software reduce the time of deploying the digital electronic detonators. Building on its safe, reliable and simple operation, our work efficiency was improved. Such detonators also offer security and information features that are not provided in traditional detonators, which can achieve clear and instant management and control functions of the detonator flow. An anomalous, authorised detonator cannot be detonated if the location, time, and operator are not correctly matched. At the same time, the detonation system will report this abnormal situation to management. This function is extremely beneficial for both social security and internal management. In addition, Jiangxi Yadong has fully designed and implemented pre-splitting blasting operations for the final slope. This will ensure the stability of the slope at the end of mining and reduce damage to the integrity of the rock mass of the final slope platform caused by shock waves from general mining and blasting operations. Otherwise, this could affect the implementation of subsequent reclamation work and the stability of the slope. Sichuan Yadong completed the lease of 330 acres of land under Bailuding in 2020, of which 230 acres were used as a safety protection distance to avoid production operations interfering with external life.

Low-carbon Green Intelligent Manufacturing Overview

Green Sustainable

Recycling Economy

Circulation 1

Sustainable Governance

Social Care

Appendix

Environmental Education

Side Slope Stability

Perform operations in strict accordance with guidelines for the exploitation and use of mineral resources, preliminary design and safety facilities. Check operation slopes before, during and after operations; organise regular site inspections; suspend operations when pumice, umbrella rocks, etc. are found and deal with them immediately. Resume operations once hidden dangers are eliminated. Jiangxi Yadong has commissioned Jiangxi Mining Safety Technology Co., Ltd. to conduct annual safety inspections on open-pit slopes and has issued gualified reports. Sichuan Yadong has installed ten monitoring points on the final slopes of Majialiangzi to monitor and measure the final slope of Majialiangzi each quarter.



Pre - split blasting is carried out at the end of the slope to maintain the integrity and stability of the rock mass.

Safety education and emergency prevention drill

All mines implement safety training for personnel, conduct hidden hazard inspections and emergency drills for mine safety. In 2020, Jiangxi Yadong organised 14 personnel safety sessions, training a total of 469 people, and organised 3 company-level private line hidden hazard inspections. Hidden dangers in each mine group were listed several times, for a total of 249 hidden dangers. These were all general dangers, and all rectifications were completed.

Jiangxi Yadong

Four emergency drills were conducted in 2020, including one special emergency rescue drill (the Service Vehicle Accident Emergency Rescue Drill on September 28, 2020), two on-site disposal drills (On-site emergency drill for blasting anomalies on May 22, 2020 / On-site treatment of blasting personnel minor injuries on July 18, 2020) and one emergency response (On-site fire rescue & emergency rescue on May 11.2020).

Huanggang Yadong

In 2020, we conducted six hidden danger inspections, detecting and rectifying 389 hidden dangers. In July 2020, we implemented the Emergency Rescue for Accidental Explosions.

Sichuan Yadong

In 2020, in accordance with the principles of daily safety inspections and patrol inspections, a total of 273 inspections were carried out which identified 114 hidden safety hazards.

Sichuan Yadong implemented three emergency plan drills, namely the 'Diesel Depot Firefighting Drill' on December 4, 2020, as well as the 'Special Drill for Mine Production Safety Accidents' and the 'Management Plan for On-Site Material Pile Collapse' drill on December 25, 2020.









Sichuan Yadong's safety plan drill

Jiangxi Yadong's safety education and training

Sichuan Yadong's safety education and training

Jiangxi Yadong's emergency plan drill

Sustainable Mines

Overview

Green Sustainable **Circulation 1**

ow-carbon Green Intelligent

Manufacturing

Recycling Economy

Social Care Appendix

Environmental Education

Sustainable Mines

Water recovery and reuse

Asia Cement (China) excavated intercepting ditches, drainage ditches and sedimentation tanks for all its mines. The water in the sedimentation tanks is recycled to use for spraying and dedusting in the mining area, providing atomized dust removal for crushers, sprinkling water on roads and watering its own green saplings.



Jiangxi Yadong's secondary sedimentation tank

Huanggang Yadong

In 2020, 1,000 meters of inner drainage ditch on uphill roads were repaired. In the same year, Sichuan Yadong also added about 1,000 meters of drainage ditch to the mining platform. The mines of two companies used terrain heights to direct surface runoff from mining sites to the road drainage system. The road drainage system used intermediate energy dissipation pools or turn-back bends to disperse the runoff energy, collect the runoff into low-point sedimentation ponds under the mountain, and then discharge after purification. They also sampled and monitored water quality at the external discharge outlet on a regular basis.

Jiangxi

Yadong

Water and soil conservation facilities have been built, including an existing drainage ditch of about 6,000 meters in the limestone mining area and a drainage ditch of about 5000 meters in the sandstone mining area. Limestone mines have large four-stage sedimentation ponds (The first-stage sedimentation pond has a capacity of 11,000 m³, the second-stage has 12,000 m³, the third-stage has 2,000 m³, and the fourth-stage has 800 m³). Sandstone mines have three large sedimentation ponds, with capacities of 15,000 m³, 1,200 m³ and 2,000 m³ respectively. New construction in 2020: The limestone mining area hardened 900 meters of drainage ditch, and constructed four new 2m*2m*2m sedimentation ponds; the sandstone mining area constructed one 10m*15m*3 m sedimentation pond to form a closed water system in the mine, and while sampling and monitoring water at the two outlets for external discharge, in accordance with the applicable first-level standard in the Integrated Wastewater Discharge Standard (GB8978-1996). The test results of various indicators (pH value, suspended solids, chemical oxygen demand, five-day biochemical oxygen demand) all met the standard. In order to strengthen the operator's foresight of and emergency response to safety hazards, each mine implements annual emergency drills.



Jiangxi Yadong's four-stage sedimentation tank



1.3 Re-vegetation in Mines

Mine Environment and Reclamation

Mining on an Orderly Basis

The mining is carried out through platforms formed from up to down. The platform is 12meters high with 4-meters width. The slope angle of each platform is controlled at 70 degrees while the overall slope is controlled within 50 to 55 degrees to ensure safe operation. After the completion of mining in each platform, we would lay planting soil on the platform immediately for planting and greening, which facilitates green recovery and ecosystem restoration after mining. Remedy measures would be carried out alongside with mining, and the greening cost and maintenance cost are relatively economical and could achieve obvious results.



Jiangxi Yadong's mines in 2019



Jiangxi Yadong's mines in 2019



Soil cover for the terminal platforms (Sichuan Yadong in 2020)

Sustainable Mines

Overview



Terminal section re-greening (Sichuan Yadong in 2020)

Recycling Economy

v-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 1





Ecological Garden Area

Multi-function hall



Ecological plantations

Ecological Park of Sedimentation Tank

Landscaping Surrounding Areas

To reduce the impact on the landscape and rebuild visual harmony with the surrounding environment, in 2019 Jiangxi Yadong started to build ecological agricultural parks, exhibition halls, ecological garden areas, ecological agricultural parks, sedimentation pond ecological areas, and natural garden green areas. These which were completed in succession and put into use in 2020. Also starting in 2020, Sichuan Yadong began beautifying the living area of the mines, including renovating the parking lot and constructing a new overlapping water landscape, round, colourful storeroom and an electronic display. These are expected to be completed and put into use in 2021.

Social Care Environmental Education

Appendix

Q

Dust Suppression in Mines and Roads

Implement dust control during mine production and for roads, to reduce escaping pollution: Currently, each mine site is equipped with 12 sprinklers, and some road sections are equipped with a total of 2,100 meters of automatic sprinkler equipment. In order to make the treatment of muddy roads and dust control easier, each mine has hardened the permanent transportation road and crusher dumping platform. In 2020, Jiangxi Yadong hardened 2,000 meters of road in the mining area. The mobile sprinkler equipment in the mine continuously sprinkles water during the mining area's production time. In addition, one side of the road has been equipped with 1,250 meters of fixed automatic sprinkler pipeline, while the fifth-line storage silo in the limestone mining area has been closed to reduce dust. The Huanggang Yadong mining area hardened 2.8 kilometres of road across the entire mining area. In 2020, the Sichuan mining area also hardened about 1,000 m², from the power distribution room in the living area to the silo under the mountain. Furthermore, a fixed water spray system was set up beside the reservoir to the 1,500 belt pulleys along the transportation road, covering around 928 metres of pipeline along the system. Furthermore, a spray system was set up in each crusher unloading silo for dust suppression.



Harden roads from the living area to the large silo





Cover with soil and make the temporary mining area of Matou Limestone Mine green. (in 2019)



Cover with soil and make the temporary mining area of Matou Limestone Mine green. (in 2020)



The temporary mining area of Xinwutian Limestone Mine(in 2019)



The temporary mining area of Xinwutian Limestone Mine(in 2020)

Mining and Reclamation Hand in Hand

In 2020, Jiangxi Yadong will cover the temporarily unexploited areas with soil and planted with tree seedlings to reduce the exposed area and minimize the visual impacts.

Company	Actual performance in 2020
Jiangxi Yadong	A total of 38 hectares were greened (30 hectares of limestone mining area and 8 hectares of sand shale mining area), 9,100 tree saplings planted, 7,000 kilograms of grass seeds sown.
Huanggang Yadong	Fully cover with soil and plant saplings on the terminal side of the mining area. A total of 0.48 hectares were greened (about 1.35 kilometers slope), approximately 67,000 tons of soil replanted with vegetation, Transplanting 7300 trees, as well as 820 kg of tree seeds and grass seeds sown.
Sichuan Yadong	26.7 hectares were greened, 8,200 trees were planted, 400 kilograms of grass seeds were sown.

 Sustainable Mines
 Low-carbon Green Intelligent Manufacturing
 Recycling Economy
 Social Care
 Environmental Education

 Overview
 Green Sustainable Circulation 1
 Sustainable Governance Circulation
 Appendix



Ecological Diversity

Jiangxi Yadong Mine completed the construction of the mine greenhouse nursery and healthy outdoor space in 2019 and began to cultivate local native tree species. The greenhouse nursery raises seedlings in autumn, winter and spring, and chooses species suitable for local growth such as acacia, Chinese tallow, camphor, sapindus, wisteria, and parthenocissus laetevirens. Numbers are calculated according to the needs of the area. About 15,000 black locusts are being raised, with 10,000 having been transplanted to the mining area. The Huanggang Yadong nursery cultivated 1,000 photinia and 200 cedar in 2020. The nursery healthy space cultivated 2,000 photinia glabra, 80 golden lycium, 100 ligustrum lucidum, and 2,000 colorful osmanthus. At the beginning of 2020, the Sichuan Mine also purchased a greenhouse seedling cultivation system (16mL*16mW*4.8mH) which was successfully installed in October and will start the nursery after spring 2021.



Ensuring health of seedlings by repotting after cultivation in Huanggang Yadong greenhouse



Integrated Resource Utilization

High-magnesium limestone that cannot be used as raw material for cement is used to produce construction fillers in Jiangxi Yadong, and the powder produced from the production of fillers is used as cement ingredient, which basically achieves the full utilization of waste rock.

Company	Actual performance in 2020
Jiangxi Yadong	Jiangxi Yadong use high-magnesium limestone, which cannot be used as aggregate for cement, to produce construction aggregates. The powder produced from the production of aggregates is used as cement ingredients, thereby basically achieving full utilisation of waste rocks.
Huanggang Yadong	Huanggang Yadong use high-magnesium limestone, which cannot be used as aggregate for cement, to produce construction aggregates. The powder produced from the production of aggregates is used as cement ingredients, thereby basically achieving full utilisation of waste rocks.
Sichuan Yadong	In 2020, the integrated utilization of low-quality limestone and topsoil in the limestone mine is about 1.07 million tons and the annual production of limestone for cement is 10.7 million tons, The utilization rate of the mixture of high aluminum and soil is about 10%, and the comprehensive utilization rate of waste rock in the whole three mines is about 23.78% on average.







Energy Saving and Emissions Reduction

In 2020, Jiangxi Yadong replaced four old dump trucks and two old excavators, adding two new dump trucks, one new hydraulic excavator, and one D8T hydraulic bulldozer. Their scope of service was also reduced, to avoid frequent changes to service area and commensurate fuel consumption. In 2020, Sichuan Yadong replaced three old dump trucks, one old wheel loader, and one hydraulic drilling rig, adding two new dump trucks and one new hydraulic excavator to meet the latest environmental emissions standards. Huanggang Yadong purchased a CAT349 excavator and a D50 drilling rig. No waste water is produced throughout the whole production and crushing process in all mines. Surface rainwater is discharged into multi-stage sedimentation ponds for comprehensive utilisation. An oil filter tank has also been installed in the washing area of the repair area. Jiangxi Yadong renovated the oil filter tank of the repair area in 2020 and added one set of oily wastewater treatment equipment, the water quality of which meets standards after treatment. In addition, an automatic wheel washing machine has been built, with all mining vehicles being washed before going out of the mine.



Jiangxi Yadong rebuilt the high-pressure turbine washing machine.

Technological and Digital Mines

Both Jiangxi Yadong and Huanggang Yadong have completed the first stage of digital mine construction, integrating video monitoring screens with production, mining and environmental monitoring alongside other data in the established "remote comprehensive monitoring system for mines". They also realised 3D visualisation applications in the initial stage, to comprehensively display production, reclamation and greening information etc. in the mining area. Sichuan Yadong planned to build the first stage of the timely management system in 2020, including the on-location 3D visualisation system, the online environmental monitoring system, the intelligent video monitoring system, production information management and electronic production scheduling system, output measurement system, electronic production scheduling system, fuel supply management system, and equipment health and other modules. These are all expected to be completed by the end of 2021.



Jiangxi Yadong invested 16,076,900 RMB in 2020. It has completed 90 engineering projects, including: 40 concerned with mining area environments, 12 with resource development methods, 6 with comprehensive resource utilisation, 10 with energy saving and emission reduction, 4 with technological innovation and digital mines, and 18 with corporate management image. In 2020, Huanggang Yadong invested a total of 14.686 million RMB to complete 11 engineering projects in accordance with green mine construction standards and schedules of Wuxue City, including: 3 projects concerned with mining area environments, 2 with resource development methods, 2 with comprehensive resource utilisation, 1 with energy saving and emission reduction, 2 with technological innovation and digital mines, and 1 with corporate management image. Sichuan Yadong invested a total of 22.095 million RMB in 2020 to complete 28 engineering projects, including: 17 projects concerned with mining area environments, 2 with energy conservation and emission reduction, and 7 with corporate management image.

 Sustainable Mines
 Low-carbon Green Intelligent Manufacturing
 Recycling Economy
 Social Care
 Environmental Education
 20

 Overview
 Green Sustainable Circulation 1
 Sustainable Governance Circulation
 Appendix
 20

Asia Cement (China) Investment in Green Mines

Sustainable Mines

Overview

	Asia Ce	ment	(China) Investment in Green Mine	es in 2020		Currency: RMB
Company	Total Investmen Unit: RMB0'000					
	-		Total project investment	number of terms	Amount	1,607.95
		1	Environmental projects for the mining area	40	769.01	
		2	Mining development methods	12	89.16	
Jiangxi Yadong		3	Integrated resource utilization	6	58.69	
		4	Energy saving and emissions reduction	10	427.27	
		5	Technological innovation and digital mines	4	24.69	
		6	Corporate management and image	18	239.13	
	-		Total project investment			1,468.60
		1	Environmental projects for the mining area	3	28.68	
		2	Mining development methods	2	670.68	
Huanggang		3	Integrated resource utilization	2	0.00	
Yadong		4	Energy saving and emissions reduction	1	750.00	
		5	Technological innovation and digital mines	2	11.47	
		6	Corporate management and image	1	7.77	
	-		Total project investment			2,209.5
	-	1	Environmental projects for the mining area	17	571.6	
		2	Mining development methods			
Sichuan Yadong		3	Integrated resource utilization	2	40.4	
		4	Energy saving and emissions reduction	2	1,408.9	
		5	Technological innovation and digital mines			
		6	Corporate management and image	7	188.6	
			Total			5,286.05

ow-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 1

1.4 Sustainable Planning for Mines

The development of mining resources is necessary for human survival, economic growth and social development. In the past, this would inevitably lead to the destruction of the ecological environment and impact human settlements. In order to reap the fruits of social and economic progress, it was normalised. However, mineral resources are non-renewable. Mining is only a temporary use of land and, once the resources are completely exhausted, it takes several times longer than the mining time before the environment has a chance to rebalance. However, this balance will be far less diverse and productive than the pre-mine environment.

The sustainable mine plan is a continuous and rolling long-term plan that includes planning, practice, inspection, revision, and re-action. Before mining, it is necessary to draw up a mining plan, a land reclamation plan and a post-mining land use plan. During mining, individuals should mine and develop final topography in an orderly manner and in accordance with the above plan, and revise the plan at any time in alignment with social, environmental and technological progress. Then it would be possible to finally establish a similar environment of post-mining land use and achieve the ultimate balance between resource development and environmental protection. Based on this goal, the plan is divided into a multi-faceted implementation policy, which serves as a guide and evaluation reference for planning various mines.

1 Standards for safe, environmentally-friendly and harmonious operations

- a. Adopt top-down section mining. The platform section is designed as an inwardly inclined flow platform to guide surface runoff to the mine drainage system on the inside of the platform section.
- b. For the safety of protected structures from blasting vibrations around the mining area, the particle vibration speed allowed for blasting activities is below the normative limit of 1.5cm/sec.
- c. The water quality of the mine's external water discharge outlets shall be sampled quarterly, which meets the first-level standard in Table 4 of the GB8978-1996 Integrated Wastewater Discharge Standard.
- d. According to the Technical Code for Non-coal Open-pit Mine Slope Engineering (GB51016-2014), the slope stability monitoring system monitors slope displacement observation piles on the observation platform every month; the error of the displacement point at the monitoring point is less than 1mm.
- e. The noise generated by production activities meets the category 2 limit value of the GB 12348 Emission Standard for Industrial Enterprises Noise at Boundary; the exhaust gas meets the limit value of Table 2 of the GB 4915 Emission Standard of Air Pollutants for Cement Industry.

Environmental Education

Recycling Economy

Appendix

Social Care

Sustainable Mines

2 Energy-saving resource utilisation

- a. Achieve zero waste discharge in mining and full utilisation of resources.
- b. Regularly replace old equipment to ensure compliance with the latest gas emission standards stipulated by the environmental authorities.
- c. Establish a whole-process energy accounting system for all mines.
- d. Plan the construction of digital mines towards the direction of unmanned electrification.

3 Green mining and ecological diversity

- a. Temporarily cover exposed areas with soil and plant greenery, except for planned mining areas within 2 years.
- b. Complete the terminal platform drainage facilities, soil covering and planting work before mining.
- c. Entrust professional institutions to complete ecological surveys and cultivate in-situ tree species suitable for local growth in the nursery before transplanting them to the mines for planting.
- d. Record the process of reclamation.



4 External interaction

- a. Establish communication channels between the community and the outside world; communicate regularly with outside entities and disclose relevant information.
- b. Establish mutual support for people in the mining area, work together to build harmony between the enterprise and the land and improve quality of life.
- c. Open the mine sites to interest groups for them to visit, understand and interact with us.



The post-mine planning image of the Jiangxi Yadong Matou Limestone Mine



Jiangxi Yadong Xiazhang Limestone Mine was announced to have been included on the 2020 National Green Mine Selection List.

Jiangxi Yadong Xiazhang Limestone Mine was announced to have been included on the 2020 National Green Mine Selection List.

2020

In May 2019, Jiangxi Yadong received the second prize and the individual second prize of the Green Mine Science and Technology Award from ZHONGGUANCUN Green Mine Industry Alliance for the "Green Mine Construction Project of Comprehensive Ecological Park Rehabilitation by Utilizing Industrial Sites (利用工业场地复垦 综合生态园绿色矿山建设项目)".

The mines under Asia Cement (China) have been selected in the list of national green mines in 2019, among them, a total of four mines have been approved and the public codes are as follows::

- ① 250 (Jiangxi Yadong Ma Tou Limestone Mine (Jiangxi Yadong 码头灰岩矿)
- 2 357 (Huanggang Yadong Benji Mountain Limestone Mine (Huanggang Yadong畚箕山灰岩矿))
- ③ 366 (Yuanyishan Xuejiachong Limestone Mine (园椅山-薛家 冲灰岩矿))
- ④ 359 (Middle Bay Sand Shale Mine (中间湾矿区砂页岩矿)

1.5 Employment and Communication of Local Residents

Providing Employment Opportunities

Since its establishment, Asia Cement (China) has always regarded job creation and fulfilling employment as its due social responsibilities, and has made positive contributions to expanding social employment. In 2020, local employees accounted for 76% of all employees in Asia Cement (China). We hire local workers, provide job opportunities, retain outstanding talents, and promote local economic development.

Compony	Total	Local em	ployees
Company	TOLAT	Number of employees	Percentage
Jiangxi Yadong	1,009	681	67%
Huanggang Yadong	288	222	77%
Nanchang Yadong	49	28	57%
Nanchang Yali	103	41	40%
Jiangxi Yali	122	85	70%
Yangzhou Yadong	163	113	69%
Taizhou Yadong	32	28	88%
Hubei Yadong	431	389	90%
Wuhan Yaxin	267	249	93%
Wuhan Yadong	77	58	75%
Wuhan Yali	50	43	86%
Hubei Yali	83	72	87%
Sichuan Yadong	563	396	70%
Sichuan Lanfeng	396	322	81%
Sichuan Yali	50	38	76%
Chengdu Yali	39	34	87%
Sichuan Yali	82	80	98%
Total	3,804	2,879	76%

Note: Local employee refers to the employee's native place in the prefecture-level city where the company is located.

ow-carbon Green Intelligent Sustainable Mines Recycling Economy Social Care Manufacturing Green Sustainable Overview Appendix **Circulation 1**

2019

Environmental Education

Valuing Local Employees

The total number of competent employees is 563 of Asia Cement (China) in 2020, and local competent employees is 270, accounting for 48%. The proportion of Chinese native competent employees is 91%, and we will continue to improve the level of localization.

Company	Competent employee (tenth (including tenth) position or above)	Local competent employee	Percentage of local competent employee	Chinese native competent employee	Percentage of competent employee
Jiangxi Yadong	192	53	28%	175	91%
Huanggang Yadong	41	27	66%	40	98%
Nanchang Yadong	10	5	50%	9	90%
Nanchang Yali	10	9	90%	10	100%
Jiangxi Yali	12	12	100%	12	100%
Yangzhou Yadong	20	8	40%	17	85%
Taizhou Yadong	3	0	0%	2	67%
Hubei Yadong	88	74	84%	76	86%
Wuhan Yaxin	31	18	58%	29	94%
Wuhan Yadong	13	10	77%	11	85%
Wuhan Yali	7	4	57%	6	86%
Hubei Yali	5	3	60%	5	100%
Sichuan Yadong	76	16	21%	66	87%
Sichuan Lanfeng	39	21	54%	38	97%
Sichuan Yali	5	4	80%	5	100%
Chengdu Yali	4	4	100%	4	100%
Sichuan Yali	7	2	29%	6	86%
Total	563	270	48%	511	91%

Note: Local supervisor refers to a person at grade 10 or above, whose hometown is the municipal city of the Company.

Sustainable Mines





Giving Back to Locals

In 2020, Asia Cement (China) invested about 8,078,462.19 RMB to take care of the local people and beautify the community, build a good community environment, and strive to achieve the goal of "prosperous industry, beautiful ecology, rich life". Other local social care is detailed in "Green Sustainable Circulation 4-Social Care".

Community Negotiation and Communication

Asia Cement (China) implements the concept of closeness and being good neighbours and attaches importance to the rights and interests of local residents. We also establish channels to actively coordinate and communicate with local residents and promote harmony between the Company and the community in combination with the social needs of residents and the demands of stakeholders.

Negotiation and Communication with Local Residents in 2020

Company	Item	Number of Sessions	Number of Participants
Jiangxi Yadong	Resolving disputes in factories and mines	8	57
Sichuan Yadong	Incident of villagers blocking the road in the Tazishan clay mining area	1	18

Intelligent Manufacturing Overview

Low-carbon Green

Recycling Economy **Green Sustainable** Circulation1

Sustainable Governance

Social Care

Appendix

Education

In accordance with China's national policy, Asia Cement (China) is committed to producing the "Skyscraper" brand low-carbon, green and environmentally-friendly, high-quality cement. It actively promotes the construction of green factories and energy-saving and environmental protection reforms, as well as continuously innovates to build a cement enterprise of highquality, high-environmental protection, high-service, high-intelligence, lowenergy consumption and low-emissions. It also makes the biggest new contribution towards the goals of reaching peak carbon in China's cement industry by 2023 and carbon neutrality by 2060.

① Formulate a project plan and designate a professional team to complete the study.

② Organise monthly meetings of various plants and technical departments to review the progress of diverse projects; study and optimise measures for continuous innovation and improvement.

③ Organise experts to evaluate and guide the relevant cement plants for discussion, study, improvement and progress.

④ The various plants of Asia Cement (China) mutually cross-check quality, equipment, etc., and learn from each other.



Specific Actions and Initiatives





 \geq

Evaluation

Methods

2020企业社会责任报告 <u>corpor</u>ation social report

2.1 Low-carbon Green Leadership

Low-carbon green leadership implementation strategy

Asia Cement (China) actively promotes the concept of low-carbon and green environmental protection, and comprehensively establishes green cement factories with intensive and rationalized plants, harmless co-processing, clean production processes, and low-carbon energy consumption. They also promote carbon footprint verification of Portland cement and ordinary Portland cement to continuously improve the footprint, while actively striving for the certification of low-carbon products to continuously produce low-carbon green cement.

Model Student for Low-carbon Manufacturing Process and Technology



INNOVATION



Try to mix separatelyground limestone and industrial waste slag into mixed powder, and then add this to cement instead of slag to reduce the cost of cement production and energy consumption.

02

Try to use modified phosphogypsum in place of natural gypsum and desulfurized gypsum to reduce the cost of cement production ingredients, support the national environmental protection policy to consume phosphogypsum from fertilizer plants (turning waste into treasure), and reduce the mining and use of natural gypsum.

03

Promote the testing and use of coal combustion aids and raw material grinding aids to reduce production power consumption, coal consumption, and carbon emissions.

04

Study cement kiln SCR denitrification technology, low-nitrogen combustion technology, and staged combustion technology to achieve the goal of ultra-low pollutant emissions.



Sustainable Mines

Low-carbon Green Intelligent Manufacturing

Recycling Economy Green Sustainable Circulation 2

Sustainable Governance

Social Care

Appendix

Environmental Education

> CSR 2020企业社会责任报告 corporation social report

Voluntary Reduction of Greenhouse Gases

Asia Cement (China) actively promotes its cement plants to achieve ultra-low pollutant emissions and reduce greenhouse gas emissions. Sichuan Yadong kilns #2 and #3 and Sichuan Lan Feng kilns #1 and #2 have passed the level B standard review of environmental protection ultra-low emissions. Its NO_x emission value is less than 100 mg/m³, SO_2 emission value is less than 50 mg/m³, and the dust emission value is less than 100 mg/m³. The cement plants of Asia Cement (China) have a low intensity of greenhouse gas emissions. Asia Cement (China) actively promotes research on effective measures to reduce comprehensive coal consumption and comprehensive power consumption of clinker production, implementing cement kiln co-processing and using waste-derived fuels to replace some coal. The Company also makes ongoing improvements through innovative concepts, and uses reasonable solutions to continuously reduce greenhouse gas emissions.

Low-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 2

Other Low-carbon Reductions (Save electricity, improve efficiency, etc):

Sustainable Mines

Overview

Promote the use of air suspension blowers, permanent magnet motors, etc., to reduce power consumption in cement production.

Adopt cement delivery cards to improve delivery efficiency and reduce paperwork.

2.2 Measures under Intelligent Manufacturing Cement 4.0

Actively promote the upgrading and transformation of cement production-related equipment; use automated and intelligent equipment to improve production efficiency and product quality; continuously collect and improve various production data; use big data analysis to improve production operation parameters and increase output; reduce energy consumption; optimise quality, and intelligently manufacture the "Skyscraper" brand eco-friendly cement of high-quality, high-environmental protection, high-efficiency, and low-cost.

Objectives for Intelligent Manufacturing Cement 4.0



The implementation of Measures under Intelligent Manufacturing Cement 4.0 of Asia Cement (China) in 2020:

Build a predictive maintenance system to determine the operation trend of production equipment in a timely manner; realise predictive maintenance for the status of important equipment; reduce maintenance costs and equipment failure rates to ensure efficient and safe production.

Try to use the cement online particle size distribution meter to optimize cement particle gradation, reduce grinding power consumption, and improve cement performance.



Benefit analysis

Improving cement quality, reduce cement energy consumption, improve production conditions, increase customer satisfaction, and provide a strong guarantee for the production of green and low-carbon cement by transforming the cement production system into smart manufacturing.

Sustainable Mines

2.3 GHG and Energy Management

GHG Emission and Reduction Measures

Human activities have increased the greenhouse effect, leading to global climate change. In recent years, countries around the world have established a consensus on greenhouse gas emission control, promoted greenhouse gas inventory operations, established management systems and actively reduced greenhouse gas emissions to achieve the goal of neutralising carbon dioxide emissions. 2020 was an important year in the battle for pollution prevention and control. As the largest developing country, China should achieve the interim goals in the battle for pollution prevention and control by focusing on key points, making up for shortcomings, and doing a solid job of key tasks, to achieve "being united, create a new win-win situation of climate governance cooperation".

Asia Cement (China) actively responds to concerns about global climate change, protects the earth's resources and fulfils its corporate citizenship responsibilities. We conduct greenhouse gas emissions inventory according to the country's development trend of greenhouse gas control and the requirements of future greenhouse gas reduction and neutralisation. At the same time, we establish internal documentation and verification procedures to provide references for implementing effective reduction and improvement plans in the future. In addition, in response to the national environmental protection spirit of reducing greenhouse gas emissions, energy saving and carbon reduction, we produce low-carbon green cement products, achieve sustainable energy development goals that take into account resource efficiency, energy conservation, and environmental protection, and make joint efforts to transform and upgrade the industry toward a low-carbon economy.

GHG Emission

Recycling Economy

Green Sustainable

Circulation 2

Low-carbon Green Intelligent

Manufacturing

Overview

Enterprises must take substantial measures to face the pressures and challenges of carbon emission reduction at home and abroad. To reduce carbon emissions, an enterprise must first quantify its internal carbon emissions and organize an inventory of greenhouse gas emissions. Table 1 and Chart 1 show the total greenhouse gas (CO_2) emissions of cement clinker products in various production lines of all consistant cement plants under the jurisdiction of Asia Cement (China) in 2020.

Table 2 and Chart 2 show the greenhouse gas (CO_2) emission intensity of cement clinker products of all consistant cement plants under Asia Cement (China) from 2018 to 2020. Greenhouse gas emission intensity refers to the amount of carbon dioxide emissions per unit of clinker production. When the amount of carbon dioxide emissions per unit of clinker production decreases, another step is taken towards a low-carbon development model. Since the Development and Reform Office implemented the greenhouse gas emission monitoring program in 2017, Asia Cement (China) has been active in improving greenhouse gas emissions - online monitoring, collecting real-time data, and taking CO_2 emission reduction measures as one of the top priorities. The data in Table 3 and Chart 3 show that CO_2 emission intensity slightly increases with the decrease in clinker production due to the coronavirus epidemic in 2020, but it is still controlled to below 0.9, indicating that Asia Cement (China) has taken measures and has the determination to reduce greenhouse gas (CO_2) emission intensity. We have tried our best to fulfil our social responsibility to treat the environment well and benefit the environment.

Environmental Education

Appendix

Social Care

Sustainable Governance

● CSR 2020企业社会责任报告 corporation social report

Table 1.Greenhouse gas emissions of cement clinker products of Asia Cement (China)'s Consistent Cement Companies in 2020 :

	Production lines	2020			
Company	(Kiln)	Clinker output/0,000 tons	Total emission of CO ₂ /0,000 tons	Emissions intensity of CO ₂	
	#1	158.07	137.59	0.870	
	#2	154.42	134.66	0.872	
Jiangxi	#3	161.38	140.38	0.870	
Yadong	#4	169.00	146.57	0.867	
	#5	249.49	218.76	0.877	
	#6	231.18	204.05	0.883	
Huanggang Yadong	-	142.13	127.93	0.900	
Hubei	#1	154.96	134.89	0.870	
Yadong	#2	139.49	120.13	0.861	
Wuhan Yaxin	-	73.94	67.56	0.914	
	#1	138.14	121.50	0.880	
Sichuan Yadong	#2	141.46	124.90	0.883	
	#3	144.90	126.34	0.872	
Sichuan	#1	154.25	135.22	0.877	
Lanfeng	#2	177.93	154.80	0.870	

Note: Emission intensity of CO_2 = total emission of CO_2 (t CO_2) /clinker output (t clinker)

Sustainable Mines

Overview

Low-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 2

Chart 1. Greenhouse gas emissions data of cement clinker products of Asia Cement (China)'s Consistent Cement Companies in 2020: (CO_2)



Table 2. Greenhouse gas emissions intensity of cement clinker products of Asia Cement (China)'s Consistent Cement Companies in 2018-2020:

Compony	Emissions intensity of CO ₂				
Company	2018	2019	2020		
Jiangxi Yadong	0.863	0.870	0.874		
Huanggang Yadong	0.904	0.934	0.900		
Hubei Yadong	0.958	0.824	0.866		
Wuhan Yaxin	0.938	0.933	0.914		
Sichuan Yadong	0.875	0.875	0.878		
Sichuan Lanfeng	0.871	0.871	0.873		

Environmental Education

. . . .

Recycling Economy

Appendix

Social Care



Chart 2. Greenhouse gas emissions intensity of cement clinker products of Asia Cement (China)'s Consistent Cement Companies in 2018-2020: (CO_2)



Table3. Average Emission Intensity of GHG (CO₂) in Asia Cement (China)

Year	Clinker output/0,000 tons	Total emission of CO ₂ /0,000 tons	Emissions intensity of CO ₂
2018	2480	2192. 5	0. 884
2019	2484. 2	2165. 0	0. 872
2020	2390. 74	2095. 3	0. 876

Note: Emission intensity of CO₂ = total emission of CO₂ (t CO₂) /clinker output (t clinker)



Emission intensity of CO₂

Note: Emission intensity of CO₂ = total emission of CO₂ (t CO₂) /clinker output (t clinker)



 Sustainable Mines	Low-carbon Green Intelligent Manufacturing	\square	Recycling Economy	Social Care	Environmental Education	\searrow	3
//	Overview		Green Sustainable Circulation 2	Sustainable Governance Circulation	Appendix		

Average Emission Intensity of GHG (CO₂) in 2018-2020

Measures to Reduce GHG (CO₂) Emissions from Cement Kilns:

Choose a reasonable cement preparation formulae can improve burnability of raw materials, reduce burning coal of during clinker calcination process and consumption and heat.

Decrease the Ca0 content in clinker appropriately under the premise of guaranteeing the quality of cement clinker. Reduce the calcium carbonate content of cement raw materials.

Reduce the amount of clinker used in cement production:Blend in industrial wastes such as slag, fly-ash, coal slag, etc. in appropriate proportions to replace some of the clinker during the cement production process; meanwhile appropriate amounts of cement grinding aids are added in cement grinding to increase production of cement mills, reduce ratio of cement clinker; can greatly reduce the CO_2 emissions generated by clinker.

Replace part of the fuel with combustible waste (Such as industrial waste, urban sewage sludge, etc).

Continuously optimise and transform production equipment to reduce energy consumption.

Implementation of Energy Management

All cement plants under the jurisdiction of Asia Cement (China) actively implement energy-saving related work, in accordance with energy management guidelines as shown in Chart 4. Through daily data statistics of coal, electricity, oil, etc. in every production line, we can query abnormal conditions in production equipment, strengthen control over energy consumption processes, and identify and control every factor that affects energy consumption. In addition, we assign specific operations to departments, positions, and personnel to achieve systematic management; review energy consumption and the progress of energy-saving renovation projects monthly; analyse and review implementation status and performance of energy conservation work quarterly; conduct annual reviews of the energy management system and other tasks; improve energy management and energy efficiency; optimise renovation or replacement of high energyconsuming equipment; improve production technology; reduce the comprehensive energy consumption of products, and realise the sustainable development of the Company through energy saving and carbon reduction.

Chart 4. Energy management policy of Asia Cement (China)

Result of Energy Saving and Carbon Reduction In compliance with "The 13th Five-Year Plan" Integrated Work Program for Energysaving and Emission Reduction of the State Council, all cement companies under Asia Cement (China) strengthened scientific management and implemented tasks related to energy saving and emission reduction. The main energy saving measures and results of cement companies in 2020 as table 4. In 2020, Asia Cement (China) replaced and transformed equipment saving a total of approximately 6,447,000 KW-h of electricity, which is equivalent to reducing CO₂ emission of approximately 3,933 tons. In process improvement, Jiangxi Yadong can save approximately about 8,988,000 KW-h of electricity and 4,659 tons of coal by using raw material additives. Sichuan Yadong can save approximately about 7,617,000 KW-h of electricity and 133,298 tons of clinker and Wuhan Yadong save 17,073 tons of clinker by using "Skyscraper" brand grinding aid . Whereas, recycling of wastewater can save 188,864 tons of water for the company.

Low-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 2

Recycling Economy

Sustainable Mines

Overview



Environmental Education

Social Care

Appendix

Table 4: Major energy-saving measures and performance of all cement companies under Asia Cement (China) in 2019 :

		Water	Coal-saving	Save electricity	Save oil	Save
Company	Important energy-saving measures	saving (T)	(T standard coal)	(KW·h)	(T)	clinker (T)
	Changed the No. 1 cement mill 1051 powder concentrator to a permanent magnet direct-drive motor system			142,560		
	Completed energy-saving renovation of two burner outer ring blowers			150,169		
	Recycled AQC external drainage	90,464				
	Incinerated solid waste		3003			
iangxi Yadong	Added #5 and #6 raw material additives		3461	8,904,880		
	Completed energy-saving renovation of two desulfurization blowers			277,200		
	Used fuel-saving spray guns				16.6	
	Completed energy-saving renovation of one burner outer ring blower			120,116		
	Added No.4 raw material additive		1198	83,663		
	Added two energy-saving air compressors			202,350		
Huanggang	Used waste heat to generate electricity, transforming the air conditioning cooling water system in the distribution room of the packaging centre			77,760		
Huanggang Yadong	Built a new downhill power generation belt conveyor for Lianhuashan No. 3 angle materials			172,005	240	
	Replaced the raw material grinding feeder with one manufactured by Shandong Stable			1,041,744		
Nanchang Yadong	Added a new raw material storage yard and shed					
Nanchang Yali	Achieved water reclamation	40,000				
Yangzhou Yadong-研 <i>磨</i>	Transformed 250W lighting into 60W LED lighting (replacing 90 lamps in 2020)			30,375		
Yangzhou Yadong-制品	Recycled greywater from washing mixer trucks (approximately 20 tons of water for washing vehicles per day during production)	6,000				
	Cancelled the relay water pump in the No.1 kiln			176,046		
	Modified the No.1 raw material feeding valve			1,061,000		
	Modified the No.2 raw material feeding valve			1,254,700		
Hubei Yadong	Renovated the No.1 cement grinding feeding valve			43,098		
Ū	Changed the No.1 kiln head roots blower to air suspension blower			146,400		
	Transformed the raw coal conveyor belt motor into a permanent magnet motor			76,500		
Nuhan Yadong	Increased the use of grinding aids in cement grinding to 0.045%					17,073.1
Wuhan Yali	Used reclaimed water to produce concrete	31,500				
	Replaced a permanent magnet variable frequency air compressor for No.3 kiln			390,000		
	Replaced the No.2 raw material mill with a feed transfer valve $% \left({{{\mathbf{r}}_{\mathrm{s}}}_{\mathrm{s}}} \right)$			610,000		
Sichuan	Replaced a new type of kiln oil gun				40	
Yadong	Replaced a permanent magnet variable frequency air compressor for the No.1 raw material mill			110,000		
	Replaced a permanent magnet variable frequency air compressor for the No.1 cement mill			235,000		
	Replaced a permanent magnet variable frequency air compressor for the No.5 cement mill			130,000		
Sichuan Lanfeng	Used the "Skyscraper" brand cement grinding aids			7,617,038		133,298
Chengdu Yali	Reused wastewater in production	18,900				
	Collected and recycled rainwater	500				
Sichuan Yali	Reclaimed production wastewater	1,500				

Sustainable Mines

Energy Density

Asia Cement (China) is implemented in accordance with the national standard "Energy Management System Requirements" (GB/T23331-2012/ISO50001: 2011) and "Energy Consumption Limit for Cement Unit Products" (GB16780-2012), and set up a long-term energy saving goal. We actively implement energy conservation and efficiency, and work hard to reduce energy intensity. Asia Cement (China) has been continuously promoting save energy and reduce consumption measures which is conducive to the company's sustainable development and social progress. The comprehensive energy intensity of cement products from the six consistent cement companies under Asia Cement (China) during 2018-2020 as Table 6 and Chart 6. The energy intensity of Asia Cement (China) was 2.75 GJ/ton cement in 2020.

Table 6. The energy density of Asia Cement (China)'s six consistent cement companies:

Category	2018	2019	2020
Energy consumption of cement (MCAL/ton)	658.81	654.29	657.09
Cement output(ton)	25,479,957	25,196,723	23,738,578
Energy Density(GJ/ton cement)	2.76	2.74	2.75

Chart 6: The energy density performance of Asia Cement (China)



 Manufacturing
 Recycling Economy
 Social Care
 Environmental Economy

 Overview
 Green Sustainable Circulation 2
 Sustainable Governance Circulation
 Appendix

Low-carbon Green Intelligent

Waste Heat Power Generation System

As the technology of cement kiln waste heat power generation matures, the State attaches importance to energy and supports energy saving and emission reduction, and more and more cement companies are becoming aware of the benefits of waste heat power generation, where they have a positive attitude towards the development of waste heat power generation. Each cement company of Asia Cement (China) has a residual heat power generation system that uses the residual heat generated by the rotary kiln system to produce hot water, then provides generator power through high-pressure steam generated by the boiler. Through recovering residual heat from the cement kiln to generate electricity not only saves energy and reduces carbon, but also protects the environment.

Table 5 and Chart 5 show statistics about waste heat power generation and plant power consumption for the six consistant cement plants under the jurisdiction of Asia Cement (China) from 2018 to 2020. The waste heat power generation ratio in 2020 was 28.10%.

Table 5. Annual waste heat power generation capacity and electricityconsumption data of Asia Cement (China)'s six consistent cement plants from2018 to 2020.

Asia Cement	Year	Waste heat recovery net power generation (KWh)	Power consumption of plant(KWh)	Proportion of waste heat power generation(%)
(China)'s six consistent cement	2018	636,198	2,152,891	29.55
plants	2019	742,330	2,820,762	26.32
	2020	612,005	2,181,874	28.10





Waste heat recovery net power generation

Power consumption of plant

---- Proportion of waste heat power generation

Circulation 2

Environmental Education

Social Care

Appendix

2.4 Water Resource Management and Pollution Prevention

2020企业社会责任报告 corporation social report

China has a vast territory and abundant water resources, but its per capita occupancy is small and it is a flood-prone country. Water resources have always been the focus of government attention. With rapid economic growth and the implementation of water resources development activities, the pressure on water resources protection is increasing. At the same time, various new ecological and environmental problems that are not conducive to human survival and development continue to appear. Following the thinking and spirit behind ecological civilization from President Xi Jinping, Asia Cement (China) has insisted on water resource management that uses water resources within its capacity in 2020, and maintains taking water resources as the most rigid constraint. With a work goal of "reasonably dividing water and managing water use", we further strengthen the foundation of water resource supervision, implement various relevant measures to strengthen supervision, improve the capacity and level of water resource supervision, curb unreasonable water demand, assist society in solving the problem of excessive development and over-use of water resources, and promote the construction of a national ecological civilization and quality development.

Conserving water will benefit us both in the present and in the future. Asia Cement (China) has always operated with the concept of "industrial development and environmental protection can go hand in hand". On the issue of protecting water resources, we not only do well in water conservation publicity, but also in strengthening water conservation awareness, water use control, and in implementing water conservation measures. Besides, we make great efforts to develop re-greening, improve the comprehensive use of water resources and develop sewage treatment technology. In this way, we continuously improve the level of water resource management and water use efficiency, realise the sustainable development of the Company, and actively make the greatest contribution of a cement enterprise to the country.

Water resource utilization, water sources and water consumption Cement companies under Asia Cement (China) usually supply water for production and domestic, such as equipment cooling water, general domestic water, etc. The main source of water is surface water in rivers near companies. The water station of the plant is stored in the reservoir for use after it is purified and sterilized. Each cement grinding companies mainly use city tap water. Water intake and annual water intake are shown in Table 1, Chart 1 and Chart 2.

Company	Water Sources	2018 water withdrawals	2019 water withdrawals	2020 water withdrawals
		(0,000ton)	(0,000ton)	(0,000ton)
Jiangxi Yadong	Upstream section of the Yangtze River in Matou town Jiujiang City	351.4	378	375.1
Huanggang Yadong	Wuxue section of the Yangtze River	45	39	37.5
Nanchang Yadong	Tap water in Nanchang City	2.2	2.9	2.1
Yangzhou Yadong	Yangluo section of the Yangtze River	3	3.8	3.5
Hubei Yadong	Tap water in Jiangxia District, Wuhan City	108.6	117.1	103
Wuhan Yaxin	Tap water in Dongxihu District, Wuhan City	25.5	29.5	16
Wuhan Yadong	Renminqu, Dujiangyan, Pengzhou City, Chengdu City	4.7	5.5	4.3
Sichuan Yadong	Aishanhe & Renminqu, Pengzhou City, Chengdu City	164.3	156.9	157
Sichuan Lanfeng	Tap water in Jiangxia District, Wuhan City	102.4	101.5	139.1

Sustainable Mines

Table 1: Water sources and water withdrawals of cement companies under Asia Cement (China)



Chart 2: Water withdrawals of Asia Cement (China)'s cement grinding companies



Manufacturing Overview

Low-carbon Green Intelligent

Green Sustainable

Recycling Economy

Circulation 2

Sustainable Governance

Social Care

Appendix

Environmental Education



35

Water resources used in production of cement companies under Asia Cement (China) use water recycling system which can recycle water after cooling, significantly reducing water consumption with a small amount of evaporation loss and no emission. The sewage is mainly from staffs' domestic water and they use rain-sewage separation system which can recycle sewage as water for afforestation, car washing, floor washing, dust - control and so on or can be discharged into the local municipal sewage pipe network.

Water Usage Process of Each Cement Company of Asia Cement (China):



Purification Method of Self-owned Water Station:

Sustainable Mines

Overview

Mainly for precipitation, filtration and add the appropriate chemicals to purify water and sterilization. Take Jiangxi Yadong for example, firstly, the drawn water will be removed sands and precipitated. Secondly, it will be added aluminium polychlorid to the water as flocculants to separate the sludge and impurities during sedimentation. And then, the water will be drawn to the water purifier for secondary filtration after sedimentation. Finally, after adding chlorine dioxide to the filtered water for disinfection, the clean water will be drawn to clean water tank for production and domestic uses.

Low-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 2



The Flow Chart of Purification Treatment of Jiangxi Yadong's Water Station:

ce

Recycling Economy

Appendix
SR 2020企业社会责任报告 corporation social report

Efficient Use of Water for Production and Water Conservation Measures

The water used in production process by each cement company of Asia Cement (China) is recycled and reused. Taking Jiangxi Yadong as an example, the raw water from the upstream section of the Yangtze River in Matou town is purified and then sent to the reservoir on Mopan Mountain for storage as tap water by using pumps. When using water, the downstream from high to low levels will be used to provide cool water and residual heat power generation for each equipment. Afterwards, the used water will be cooled by the cooling tower and flows back to the wells, then be pumped back to the reservoir on Mopan Mountain for torage and reuse. During the production process, while the wateruse measures mentioned above could lead to a small amount of water being evaporated, the rest of the water can be recycled and reused, the reuse rate can reach more than 80%, achieving the efficient use of water resources management and the concept of water conservation.

Treatment Measures of Domestic Sewage

Domestic sewage of cement companies under Asia Cement (China) is treated by "Biological contact Oxidation". The contact oxidation tank uses TDK elastic space packing of easy conjunctiva which possesses large specific surface and good oxidation resistance, while the oxidation pond uses submerged underwater aerators with low noise pollution. The removal rate of CODcr and B0D5 is up to 73% and 88%, respectively. The processing rate of ammonia nitrogen is up to 71%. The quality of water generated can reach Grade I standard as set out in the Integrated Waste Water Discharge Standard (《污水综合排放标准》) (GB8978-1996).



Sewage Treatment Flowchart:

First, sewage enters the existing oil pond in the plant area. After the oil is separated, the sewage is raised to the integrated sewage equipment by the pump. The integrated sewage equipment consists of the hydrolysis acidification zone, the contact oxidation zone, the precipitation zone and the blower room. The wastewater first enters the hydrolysis acidification zone, where complex macromolecular organic matter is converted into small molecular dissolved organic matter. The difficult-to-degrade organic pollutants in the wastewater are converted into easily degradable organic pollutants under the action of anaerobic bacteria, and a large amount of COD is removed at the same time. The effluent from the hydrolysis acidification zone enters the contact oxidation zone, and the aerobic microorganisms in the pond flocculate, oxidize, and decompose the organic matter in the wastewater into CO_2 . H₂O and inorganic salts through their own metabolism to further remove the organic matter. The effluent enters the sedimentation zone for mud-water separation and then enters the UV disinfection pond where, after UV disinfection, it is discharged into the clean pool. Recycled water can recycle sewage as water for afforestation, car washing, floor washing, dust - control and so on or can be discharged into the local municipal sewage pipe network. The discharged water quality is in line with the local sewage discharge limit as shown in the attached table.

The discharged water quality of each companies of Asia Cement (China) in 2020

oject on limits of wage (e value of urement on limits of wage (e value of urement on limits of wage (e value of urement on limits of wage (e value of urement)	рН 6-9 7.42 6-9 7.74 6-9 7.63 6-9	mg/L 70 16.00 100 15.00 70 23.00 400	oxygen demand mg/L 100 36.25 100 72.00 100 92.00	oxygen demand mg/L 20 11.05 30 18.20 20 19.40	mg/L 15 1.05 15 9.23 15	mg/L 0.5 0.28 0.5 0.41 1.0	mg/L 5 - 10 -	mg/L - - 20 -	
wage evalue of urement on limits of wage te value of urement on limits of wage te value of urement on limits of wage	7.42 6-9 7.74 6-9 7.63 6-9	16.00 100 15.00 70 23.00	100 36.25 100 72.00 100 92.00	20 11.05 30 18.20 20	1.05 15 9.23	0.28 0.5 0.41	- 10	- 20	
wage evalue of urement on limits of wage te value of urement on limits of wage te value of urement on limits of wage	7.42 6-9 7.74 6-9 7.63 6-9	16.00 100 15.00 70 23.00	36.25 100 72.00 100 92.00	11.05 30 18.20 20	1.05 15 9.23	0.28 0.5 0.41	- 10	- 20	-
urement on limits of wage ge value of urement on limits of wage ge value of urement on limits of wage ge value of	6-9 7.74 6-9 7.63 6-9	100 15.00 70 23.00	100 72.00 100 92.00	30 18.20 20	15 9.23	0.5	-	20	
wage e value of urement on limits of wage e value of urement on limits of wage e value of	7.74 6-9 7.63 6-9	15.00 70 23.00	72.00 100 92.00	18.20	9.23	0.41	-		
urement on limits of wage evalue of urement on limits of wage ge value of	6-9 7.63 6-9	70 23.00	100 92.00	20				-	
wage ge value of urement on limits of wage ge value of	7.63 6-9	23.00	92.00		15	1.0			
urement on limits of wage ge value of	6-9			19.40			-	-	
wage se value of		400		10.10	4.70	0.54	-	-	
e value of urement			500	-	35	8.0	-	-	
	7.16	17.50	32.00	-	0.65	0.59	-	-	
on limits of wage	6-9	400	500	300	-	-	20	-	
e value of urement	7.69	9.50	38.10	7.50	4.71	1.03	0.11	-	
on limits of wage	6-9	70	100	20	15	0.5	-	-	
e value of urement	7.45	8.00	15.00	3.00	0.15	0.30	-	-	
on limits of wage	6-9	70	100	20	15	0.5	5	3	
e value of urement	7.04	13.00	18.00	5.20	2.50	0.36	0.06	-	
on limits of wage	6-9	70	100	30	15	-	10	20	
e value of urement	7.44	14.20	39.00	5.80	4.32	-	0.12	0.05]
on limits of wage	6-9	70	100	20	15	0.5	5	-	
	7.42	16.00	36.25	11.05	1.05	0.28	-	-	1
	wage e value of urement n limits of wage e value of urement n limits of wage e value of	vage 6-9 2 value of n limits of vage 7.04 0 6-9 2 value of n limits of n limits of vage 6-9	wage 6-9 70 evalue of n limits of n limits of n limits of rement 7.04 13.00 n limits of rement 6-9 70 n limits of rement 7.44 14.20 n limits of wage 6-9 70 evalue of rement 7.42 16.00	wage 6-9 70 1100 evalue of n limits of nement 7.04 13.00 18.00 value of rement 6-9 70 100 n limits of rement 6-9 70 100 value of rement 7.44 14.20 39.00 n limits of evalue of rement 6-9 70 100	wage 6-9 70 100 20 evalue of n limits of wage 7.04 13.00 18.00 5.20 n limits of wage 6-9 70 100 30 rement 7.44 14.20 39.00 5.80 n limits of wage 6-9 70 100 20 evalue of vage 7.42 16.00 36.25 11.05	wage 6-9 70 100 20 15 evalue of n limits of rement 7.04 13.00 18.00 5.20 2.50 n limits of rement 6-9 70 100 30 15 n limits of rement 7.44 14.20 39.00 5.80 4.32 n limits of rement 6-9 70 100 20 15 evalue of rement 7.42 16.00 36.25 11.05 1.05	wage 6-9 70 100 20 15 0.5 evalue of n limits of rement 7.04 13.00 18.00 5.20 2.50 0.36 n limits of rement 6-9 70 100 30 15 - value of rement 7.44 14.20 39.00 5.80 4.32 - n limits of wage 6-9 70 100 20 15 0.5 evalue of rement 7.42 16.00 36.25 11.05 1.05 0.28	wage 6-9 70 100 20 15 0.5 5 evalue of n limits of wage 7.04 13.00 18.00 5.20 2.50 0.36 0.06 n limits of wage 6-9 70 100 30 15 - 10 n limits of wage 7.44 14.20 39.00 5.80 4.32 - 0.12 n limits of wage 6-9 70 100 20 15 0.5 5	wage 6-9 70 100 20 15 0.5 5 3 evalue of mlimitsof wage 7.04 13.00 18.00 5.20 2.50 0.36 0.06 n limitsof wage 6-9 70 100 30 15 10 20 n limitsof wage 7.44 14.20 39.00 5.80 4.32 0.12 0.05 n limitsof wage 6-9 70 100 20 15 0.5 5



The implementation measures of water saving management

03

05

02

06

01

Recycle the cooling water used in production equipment, reasonable control water temperature and water consumption reduce the use of fresh water consumption, and waste heat power generation steam condensate water reuse boiler. And strengthen onsite equipment management to prevent equipment leakage and other faults from polluting the circulating cooling water.

Implement measurement management, Install flowmeters and water meters in main water- using areas and workshops to monitor water production and usage on a daily basis, and to analyze water usage by comparing the data recorded so as to strictly prevent pouring, dripping and leakage of water: review water consumption on a monthly basis, and compare, analyze, and review the implementation and performance of water conservation measures on a quarterly basis.

> We properly transform and optimise production equipment into water-saving types, while publicising and educating about various water-saving measures, so that every employee can raise awareness about water-saving and implement measures.

Recycle and reuse domestic sewage after treatment to clean the wheels of outgoing raw material vehicles, spray on roads to reduce dust, go green, wash car, etc.

> Many rainwater collection ponds are made in the plant, and the fresh water after rainwater precipitation is used for washing the ground, greening and automatic car washing machine.

Optimize or update water saving equipment as appropriate, and strengthen the propaganda of water conservation and raise employees' awareness of water conservation.

Jiangxi Yadong Water Station and Mopanshan Reservoir

04



Self-built water station in Jiangxi Yadong Plant





Jiangxi Yadong Water Station Reservoir

Jiangxi Yadong production process cooling water tower



 37
 Sustainable Mines
 Low-carbon Green Intelligent Manufacturing
 Recycling Economy
 Social Care
 Environmental Education

 Overview
 Green Sustainable Circulation 2
 Sustainable Governance Circulation
 Appendix

Pollution prevention and treatment

Air pollution prevention and treatment

Air contains a variety of chemical substances, which will not affect the ecology under normal conditions and concentrations. However, as the industry progresses, more and more chemical substances are emitted, and the concentration may exceed standards. As soon as the concentration of one of the chemical substances exceeds the standard, it becomes pollution. Air pollutants in the cement industry are mainly sulphur dioxide, nitrogen oxides, and particulate matter. These pollutants can affect humans, animals, plants and other organisms.

The national "13th Five-Year Plan" ended smoothly, with the green development of the cement industry being continuously promoted. Air quality has been significantly improved, but efforts are still needed to stabilise results. Asia Cement (China) actively responds to the national development plan, adopting advanced and optimised manufacturing technologies and taking various pollution prevention measures. We strictly control all aspects of cement production, in accordance with the latest national environmental protection requirements, so that the discharge of various pollutants meets or exceeds national standards. Chart 1 to 3 show the main air pollutant emissions from each consistant cement plant under Asia Cement (China) from 2018 to 2020. Detailed data is shown in Table 1. Through the unremitting efforts in recent years of the various cement plants under the jurisdiction of Asia Cement (China), pollutant emissions have basically shown a year-on-year decline or stability; dust pollution caused by the grinding of clinker into cement powder or the grinding of slag powder by various cement grinding plants is also strictly controlled, as shown in Table 2.



Sustainable Mines

Manufacturing

Overview

Green Sustainable

Circulation 2



Chart 2: Nitrogen oxide emissions of Asia Cement (China)'s consistant cement companies from 2018 to 2020 (ton)



Appendix

Sustainable Governance

Table 1: Air pollutant emissions of Asia Cement (China)'s consistant cement companies from 2018 to 2020 (ton)

Type of e	emission	Particulate pollutant/t	Nitrogen oxide /t	SO ₂ /t
	2018	257.0	5,447.0	1,368.0
Jiangxi Yadong	2019	257.4	5,171.0	1,273.7
Tadong	2020	246.7	7,265.6	673.3
	2018	39.3	613.6	43.0
Huanggang Yadong	2019	27.7	601.3	50.7
Tauong	2020	23.6	516.6	64.1
	2018	90.0	1,064.0	88.0
Hubei Yadong	2019	85.8	734.8	137.8
Tauong	2020	45.0	548.3	114.1
	2018	21.9	453.8	19.6
Wuhan Yaxin	2019	31.5	484.4	6.3
Tuxin	2020	21.3	382.0	1.6
	2018	71.4	1,073.0	49.1
Sichuan Yadong	2019	78.8	722.7	34.5
lauong	2020	76.5	576.9	4.5
	2018	81.0	953.0	53.0
Sichuan Lanfeng	2019	91.0	724.8	80.0
Lanicing	2020	69.7	743.2	77.4

Table 2: Air pollutant emissions of each cement grinding companies under Asia Cement (China)

Type of em	Dust/t	
Wuhan Yadong		40.83
Nanchang Yadong	2020	3.90
Yangzhou Yadong		42.6

Sustainable Mines

Overview



Particulate Pollutants Treatment

Asia Cement (China) has adopted the most advanced dust collecting devices and extensively used the dust collection bag device to collect the raw materials and cement and other fine particles in the production process. For example, we have adopted heat resistant (NOMEX, 240°C) bag dust collectors for the collectors of our head kilns, and part of the electric dust collection machine is gradually replaced by bag dust collection machine. Tables 3 and 4 show the measured values of particulate matter emission concentrations from consistant cement plants and cement grinding plants under Asia Cement (China) from 2018 to 2020. From the table, it is clear that the measured values of particulate matter concentrations from cement plants have reached and even exceeded the national emission standards. In addition, such devices control the unorganized dust emission concentration of the packaged cement loading system to below 1.5mg/m³, thus significantly improving the working environment for workers and achieving clean production within the packaging workshops.

Table 3: Particles (soot and dust) emission concentration of each cement grinding companies under Asia Cement (China) from 2018 to 2020 (ton)

		Particles average emission concentration mg/m ³							
		2018			2019		2020		
Company	Emission standards		l average red value			l average red value	Emission standards	Annual average measured value	
	Upper limit	Soot	Dust	Upper limit	Soot	Dust	Upper limit	Soot	Dust
Jiangxi Yadong	Soot: 30	16.9	14.3	Soot: 30	9.0	6.0	Soot: 30	6.8	4.3
Huanggang Yadong	Dust: 20	8.4	12.3	Dust: 20	7.2	7.8	Dust: 20	10.2	10.3
Hubei Yadong		8.6	5.2		9.1	4.8		7.3	5.2
Sichuan Yadong	Soot: 20	3.3	3.0	Soot: 20	2.9	5.0	Soot: 20 Dust: 10	2.9	3.9
Sichuan Lanfeng	Dust: 10	8.0	2.0	Dust: 10	6.8	5.3		4.0	3.6
Wuhan Yaxin		4.7	6.9		6.3	7.6		5.0	7.0

Manufacturing Green Sustainable

Low-carbon Green Intelligent

Circulation 2

Recycling Economy

Social Care

Appendix

Environmental Education

Table 4: Particles (dust) emission concentration of each cement grinding companies under Asia Cement (China) from 2018 to 2020.

		Particles	average emissic	on concentratio	n mg/m³		
	20:	18	20	19	2020		
Company	Emission standards	Annual average	Emission standards	Annual average	Emission standards	Annual average	
	Upper limit	measured value	Upper limit	measured value	Upper limit	measured value	
Wuhan	1#cement grinding=10	7.7	1#cement grinding=10	3.6	10	2.02	
Yadong	2#cement grinding=20	10.3	2#cement grinding=20	6.2	10	3.93	
Nanchang Yadong	20	9.7	30	22.2	30	9.47	
Yangzhou Yadong	10	3.5	10	6.4	10	6	

Nitrogen Oxide (NOx) Control

Six consistent cement companies under Asia Cement (China) adopt lownitrogen combustion denitrification to significantly reduce the concentration of NOx emission from the smoke of kilns.

The low-nitrogen combustion denitrification process uses a low-nitrogen burner, a low-nitrogen decomposition furnace or a coal powder staged combustion equipment for the rotary kiln system. The NOx content in the air is significantly reduced by using low-nitrogen combustion to produce a large amount of carbon monoxide (CO) gas and undergo a reduction reaction with NOx. In addition, through the SNCR process where an appropriate amount of ammonia is injected into the upward air flow of kiln tail, causing a reduction reaction with NOx in flue gas to control the reduction of NOx emission. The above measures can significantly reduce ammonia consumption and also slightly reduce the unit heat consumption of clinker, providing significant economic and environmental benefits. Table 5 and Chart 4 show the annual average nitrogen oxide (NOx) emission concentration from each consistant cement plant under Asia Cement (China) from 2018 to 2020. The NOx emission concentration of each plant meets and exceeds national and local emission standards.

Nitrogen oxide average emissionmg/m³ Company Jiangxi 276.0 265.5 261.6 Yadong Huanggang 273.7 324.0 319.0 Yadong Hubei 272.0 173.2 197.7 Yadong Wuhan 192.0 272.4 179.1 Yaxin Sichuan 125.0 80.2 67.4 Yadong Sichuan 136.0 91.5 87.4 Lanfeng



Table 5: Nitrogen oxide average emission concentration of Asia Cement (China)'s consistant cement companies from 2018 to 2020.

 Sustainable Mines
 Low-carbon Green Intelligent Manufacturing
 Recycling Economy
 Social Care
 Environmental Education

 Overview
 Green Sustainable Circulation 2
 Sustainable Governance Circulation
 Appendix

CSR 2020企业社会责任报告 corporation social report

Sulfur Dioxide (SO₂) Prevention and Control



Sulfur oxide is one of the main cause for the formation of acid rain. In 2013, the PRC promulgated the Emission Standard of Air Pollutants for Cement Industry (GB 4915-2013) in response to the current severe environmental issues. Among which, it stipulates that SO₂ emission in the cement industry to be $\leq 200 \text{ mg/m}^3$, and certain regions have even stricter emission limit standards, which indicates that the government attaches importance to emission of pollutants. The attached table shows the annual average sulphur oxide (SO₂) emission concentration from each consistant cement plant under Asia Cement (China) from 2018 to 2020, which is below the limit for each cement plant; Jiangxi Yadong has particularly succeeded in remarkable effects to control sulphur dioxide emissions.

Concentration of SO₂ of Asia Cement (China)'s consistant cement companies from 2018-2020. (mg/m³)



2

Control SO₂ Emission Measures of Asia Cement (China):

Use low-sulfur fuel as much as possible to control SO₂ emissions at source.

Actively improve the production process:

Sustainable Mines

Overview

- Appropriate amount of slaked lime powder is added to a section of the preheater of the kiln system and an appropriate amount of raw material is added to the large bag collectors to the kiln tail to absorb a significant amount of SO_2 in the kiln exhaust gas.
- Adopt comprehensive treatment measures, such as the coordination of raw material mills with cement kiln control, and the use of kiln tail water spray towers for wet desulphurisation.

Low-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 2

Recycling Economy



Social Care

Appendix

The second plant of Jiangxi Yadong first established a wet (kiln dust-gypsum method) flue gas desulphurisation process. The flue gas enters from the lower side of the absorption tower and contacts the absorption slurry counter-currently. In the tower, SO₂ reacts with H₂O and the desulphuriser to form CaSO_{Chart} ½ H₂O; CaSO₃·1/2 H₂O, O₂, and H₂O, falling into the slurry pool of the absorption tower to undergo oxidation reaction and obtain the desulphurisation byproduct dihydrate gypsum. The process flow chart is shown in Chart 6. In addition, the Jiangxi Yadong First Plant has also introduced composite desulphurisation technology, which uses a combination of powder and water. The powder uses a calcium-based oxidiser and catalyst to increase calcium-based reaction activity and accelerate the rate of desulphurisation. The addition of water has a catalytic effect on the powder, increasing the reaction activity, enlarging the contact area of the reactants and extending the reaction time. The two promote each other and have a synergistic effect, as shown in Chart 7.

Chart 6: Process Flow of Wet Desulfurization of Kiln Flue Gas in the second plant of Jiangxi Yadong



Environmental Education



R 2020企业社会责任报告 corporation social report

Chart 7. Diagram of composite desulfurization technology in the first Plant of Jiangxi Yadong



Expenditure on Pollution Prevention and Control

In 2020, Asia Cement (China) invested in pollutant prevention and control expenses, including 146,088 million yuan for dust collection equipment, 38.156 million yuan for denitration and desulphurization equipment, 15.468 million yuan for pollutant discharge fees and environmental protection tax paid to the government, with a total expenditure of 199.712 million yuan, as detailed in Table 7. In addition, Table 8 shows other pollutant prevention and control measures and operating costs of consistant cement companies and cement grinding companies under Asia Cement (China) in 2020, with a total of 49.277 million yuan.

Expenditure on pollution prevention and control of each cement company and cement grinding company under Asia Cement (China) (RMB' 0,000) :

Dedusting equipment	Operation expense for big bag dust collectors	Bag dust collectors	Static dust- eliminating devices	Total operating costs of the above equipment (RMB' 0,000):	Quantity of denitration equipment t	Denitration operation expense (RMB' 0,000):	Quantity of desulfuriza tion equipment	Desulfurizati on operation expense (0,000RMNB)	Pollutants discharge fee paid and environmental protection tax to the government (RMB' 0,000):
Jiangxi Yadong	24	159	3	5,064.8	6	643.1	6	695.3	825.9
Huanggang Yadong	1	30	1	132.0	1	180.0	-	-	127.3
Nanchang Yadong	-	21	-	346.8	-	-	-	-	7.7
Yangzhou Yadong	-	2	-	79.6	-	-	-	-	5.6
Hubei Yadong	8	38	1	486.0	2	357.0	2	402.0	168.8
Wuhan Yadong	-	11	-	5.3	-	-	-	-	0.2
Wuhan Yaxin	1	22	1	30.0	1	116.0	1	5.5	86.8
Sichuan Yadong	6	57	-	6,700.0	3	757.4	-	-	151.0
Sichuan Lanfeng	2	66	-	1,764.3	2	659.3	-	-	173.5
Total	42	406	6	14,608.8	15	2,712.8	9	1,102.8	1,546.8



179.0 128.0 7.0 29.0 12.0 18.0 200.0 10.0 2,886.2 62.0 1.5 38.7 8.2 125.0 470.0 281.2 3.7 3.8 1.5 0.6 8.4 14.0 0.5 1.4 0.7 0.3 0.5 8.3 7.9 2.5 400.6 0.7 4.1 12.4 4,927.7

Other pollution prevention and control measures and operating costs of each cement company and cement grinding company under Asia Cement (China) (RMB' 0,000):

	Company	Preventive measures	Operation Expense
		Closed corridor conveyor belt	
	Sichuan Lanfeng	Closed storage yard and automatic door installation at entrances and exits	
		Fully enclose the packaging workshop	
		Self-monitor the environment	
	Wuhan Yaxin	Bear sewage treatment costs for living quarters	
		Pay for the costs of sweepers and sprinklers	
		Noise control	
	Sichuan Yadong	Sewage treatment	
The second se		Handle rogue dust	
	Hubei Yadong	Noise control	
and the second s	Wuhan Yadong	Install buried sewage processors	
	Vangshau Vadang grinding	Add one new vacuum cleaner + two fog cannons	
	Yangzhou Yadong-grinding companies	Close the entrance and exit of the raw material warehouse and the shipment yard of the packing room in the warehouse management group.	
	Yangzhou Yadong-products	Close the mixing building	
	companies	Construct a new gravel warehouse	
		Close the mixing building and gravel storage yard	
	Nanchang Yali	Clean up solid waste	
		Dredge sedimentation pond	
		Maintain the powder dust collector	
		Maintain spray equipment	
		Add two sets of rainwater recovery tanks and equipment	
	Chengdu Yali	Add one new domestic sewage treatment station (20 tons/day)	
	chenguu run	Perform environmental testing (including for noise and rogue exhaust gas)	
		Evaluate current occupational hazards in the workplace (including noise and silica dust detection)	
		Dispose of kitchen waste (entrust a qualified company for recycling)	
		Reuse production wastewater	
	Sichuan Yali	Use a bag filter in the powder storage to prevent dust from spilling out	
		Certify environmental management system	
and the second se		Clean up solid waste	
		Dredge pond water	
	Wuhan Yali	Enclose forklift feeding area and belt conveyor	
		Unclog sewage pipelines in living areas	
		Desilting work on the Datang Ditch (Section from 2-stage sedimentation pond to Datang) of the Yadong Standby Depot	
		Outsource sanitation and cleaning work for the Yangluo factory in 2020	
		Total	
43 Sustainable Mines Low	v-carbon Green Intelligent Manufacturing	Recycling Economy Social Care Environmental Ec	Jucation

Sustainable Governance

Circulation

Appendix

Green Sustainable

Circulation 2

Overview

Recycling Economy--Management Policy

With the rise of domestic environmental protection awareness and the support of national environmental protection policies, Asia Cement (China) utilises a complete cement manufacturing circular economy system for the co-processing of social industrial waste (such as from steel plants, power plants, paper mills, chemical plants, and non-ferrous metal smelters) and for the disposal and availability of domestic solid waste. Leveraging the advantages of cement kilns with extremely high firing temperature processes, we play a role in promoting waste removal and resource recycling, remanufacturing, and the saving of natural resources by using relevant waste for some of the alternative raw materials to fossil fuels in the cement process. We also assist the government in fulfilling our corporate social responsibility; in this way, we turn the waste recycling rate into a virtuous resource cycle, effectively improving resource utilisation efficiency, and moving towards the new economic value of resource recycling in the cement industry.

Evaluation methods

For the purpose of resource reuse and substitution, and the conservation of energy and natural resources, we improve the comprehensive utilisation efficiency of resources, promoting changing their use from the model of "resources->products->waste" to the circular model of "resources->products->waste >renewable resources", to realise sustainable development of the recycling economy in the future, while continuing to track achievements through CSR.



Asia Cement (China) actively promotes the use of alternative raw materials, derived fuels, solid waste disposal and hazardous waste disposal. We also apply for environmental assessment, project establishment, feasibility studies and other permits from governmental environment protection agencies, and develop waste disposal design plans with design institutes and third-party environmental protection companies to contribute to the social recycling economy.

Alternative raw materials from waste

Use converter slag, electric furnace slag, fly ash, desulphurisation gypsum, coal-fired slag, non-ferrous metal slag, sulphate slag, phosphogypsum, desulphurisation gypsum, tailings debris, heavy metal-contaminated soil, construction waste, waste limestone powder (organic pollution), domestic wastewater, sludge, etc. as cement raw materials or admixtures.



Alternative fuel from waste

Use wastewater (organic), waste-derived fuel (RDF), foam, etc., as alternative fuels.

3 Disposal of waste as corporate social responsibility

Completely decompose hazardous waste, household garbage, etc. to a harmless state after incineration in the kiln.

Sustainable Mines Low-carbon Green Int Manufacturing Overview

Low-carbon Green Intelligent

Recycling Economy

Green Sustainable

Circulation 3

Sustainable Governance

Social Care

Appendix

Environmental Education

3.1 Recycling Economy Value Chain

The cement production process is an important means to absorb industrial waste. Cement plants under the jurisdiction of Asia Cement (China) have used various industrial waste as alternative raw materials for many years. With advanced production technology, they use limestone powder, converter slag, non-ferrous metal ash, electric furnace slag, tailings and other industrial waste slag ingredients in the raw material production stage to reduce the use of limestone, sandstone, iron ore and other resources, and reduce dependence on natural mineral resources. They also uses fly ash, coal-fired slag, limestone powder, non-ferrous metal slag, desulphurised gypsum, phosphogypsum, construction waste, yellow phosphorous slag and other industrial waste slag to replace some of clinker and natural gypsum in cement production, so as to produce green cement of high-quality, low-cost, and low-energy.

Asia Cement (China) continuously and actively broadens the type and quantity of slags utilized. In 2020, a total of 5.45 million tons of industrial waste residue have been used.

The utilization volume statistics of industrial slag by cement companies under Asia Cement (China) in 2020: (ton)

Industrial v	wastes	Fly-ash	Coal slag	Limestone powder	Desulfurizati on gypsum	Phosphogy psum	Converter slag	Non- ferrous metal slag	Electric furnace slag	Sulfate slag	Tailings(sand)	Construction waste	Fragment	Yellow phosphorus slag	Others	Subtotal
1:	2018	95, 403	134, 071	0	394, 643	24, 428	0	0	0	0	641,868	49, 845	0	0	0	1, 340, 258
Jiangxi Yadong	2019	69, 534	115, 898	333, 431	422, 395	12, 312	36, 293	31,818	0	293	612, 982	58, 152	0	0	0	1, 693, 108
rauong	2020	59, 024	157, 814	0	310, 324	76, 430	74, 102	3, 441	0	0	0	110, 626	652, 401	10, 724	0	1, 454, 886
Huanggang	2018	45, 004	59, 446	176, 092	107, 959	16, 938	15, 451	0	0	0	73, 123	0	0	0	0	494, 013
Huanggang Yadong	2019	39, 062	58, 347	165, 761	93, 813	28, 789	400	15, 063	5, 999	0	54, 183	0	0	0	0	461, 417
	2020	34, 169	59, 068	118, 540	78, 056	11,048	607	9, 918	0	0	0	0	0	0	10, 384	321, 790
Nanchang	2018	86, 476	0	91,351	0	0	0	2, 935	0	0	0	5	0	0	0	180, 767
Yadong	2019	100, 969	0	99, 373	0	0	0	0	0	0	0	5	0	0	0	200, 347
	2020	68, 125	0	66, 839	0	0	0	0	0	0	0	0	0	0	0	134, 964
Verselser	2018	98, 735	19, 102	66, 925	118, 878	0	0	0	76, 318	0	0	0	0	0	0	379, 958
Yangzhou Yadong	2019	86, 763	21, 158	13, 390	115, 060	0	0	0	0	0	0	0	0	0	0	236, 371
iddong	2020	76, 351	2, 416	0	113, 287	0	0	0	0	0	0	0	0	0	0	192, 054
l luih ai	2018	356, 614	0	744, 046	237, 906	7, 174	0	52, 066	132, 040	0	0	0	0	0	5, 613	1, 535, 459
Hubei Yadong	2019	253, 679	0	404, 204	219, 320	0	0	56, 807	123, 881	0	0	0	0	0	64, 756	1, 122, 647
	2020	166, 383	2,006	299, 519	193, 332	822	66, 331	67, 151	0	0	0	0	0	56, 387	81,382	933, 313
) A (, h a m	2018	0	19, 188	735, 121	65, 842	0	0	0	42, 358	0	0	0	0	0	0	862, 509
Wuhan Yaxin	2019	0	55, 123	695, 700	79, 845	0	0	6, 652	51,942	0	0	0	0	0	0	889, 262
- Contract	2020		54, 145	1, 014, 132	61,146	0	0	41, 425	13, 209	0	0	0	0	0	0	1, 184, 057
	2018	23, 242	88, 888	72, 126	69, 898	4, 167	0	66, 088	0	0	0	0	0	0	0	324, 409
Wuhan Yadong	2019	7, 612	77, 631	58, 595	51,889	0	0	46, 280	0	0	0	0	0	0	19, 735	261, 742
iddong	2020	8, 829	65, 546	0	37, 959	3278	0	25, 964	0	0	0	0	0	0	6, 281	147, 857
Cishaaa	2018	0	0	0	119, 543	205, 559	0	36, 931	27, 298	99, 042	10, 066	0	0	0	196, 805	695, 244
Sichuan Yadong	2019	0	0	0	128, 458	201, 408	0	8, 474	40, 782	101, 848	7, 872	0	0	0	300, 052	788, 894
100015	2020	0	0	0	111, 214	170, 889	0	126, 004	30, 921	12, 923	0	14, 684	0	90, 111	103, 478	660, 224
C : 1	2018	0	12, 060	0	0	160, 822	0	21,880	8, 472	74, 889	0	26, 977	0	0	34, 537	339, 637
Sichuan Lanfeng	2019	0	8, 172	0	6, 053	175, 254	18, 253	14, 302	18, 182	77, 613	3, 572	15, 918	0	0	327, 778	665,097
Lancing	2020	0	6, 359	0	25, 128	201, 134	0	1203	9, 300	88, 284	0	16, 753	0	0	68,064	416, 225

4

Sustainable Mines Low-carbon Green Intelligent Manufacturing Green Sustainable

Circulation 3

Overview

Recycling Economy

Social Care

Environmental Education

rnance



The total utilization volume of industrial slag by consistent cement companies under Asia Cement (China) (0,000 tons)



Raw Materials and Energies and Resources of three Cement Grinding Companies of Asia Cement (China)

	ment outpu 3, 414, 529	t 🔶 🗲
	Emission	\mathbf{r}
(28	Dust	
10	83.7t	
4		

Raw material input	Clinker	2,451,802	Ton
mpac	Limestone	120,669	Ton
	Slag	542,408	Ton
Franciscut	Coal	11 209	Ton
Energy input	COdi	11,398	TON
	Fuel oil	21,486	Liter
	Electric power	132,866,902	Watt
	Water	98,474	Ton

3.2 Use of Raw Materials and Energies and Resources

Raw Materials and Energies and Resources of the six Cement Companies of Asia Cement (China)

	Limestone	31,263,151	Ton
Raw material input	Clay	680,422	Ton
	Sandstone	3,788,356	Ton
	Iron material	150,057	Ton
	Gypsum	387,066	Ton
	Slag	965,002	Ton
Energy input	Coal	3,256,714	Ton
	Fuel oil	9,483,303	Liter
	Electric power	1,732,919,377	Watt
	Water	7,972,795	Ton



 Sustainable Mines
 Low-carbon Green Intelligent Manufacturing
 Recycling Economy
 Social Care
 Environmental Education
 46

 Overview
 Green Sustainable Circulation 3
 Sustainable Governance Circulation
 Appendix
 Renewable Fuel Project

In 2020, Jiangxi Yadong assisted Jiangxi Lee & Man Paper in disposing solid waste. After sorting the solid waste and squeezing the water, it converted the waste into fuel rods and used them as an alternative fuel for cement kilns. A total of 17,518.7 tons of fuel rods and 24,772.91 tons of solid waste were landfilled and sorted by cement kilns, and industrial waste was recycled.

3.3 Wastes Disposal

Waste produced by companies under Asia Cement (China) during the production and transportation processes are mainly general production and household wastes. Its disposal strictly follows the national environmental protection requirements.Classified disposal of waste, of which the recyclable wastes were recycled before reuse and non-recyclable waste is considered to be used as a furnish when it is incinerated into the kiln or into the raw material mill.In addition, various plants are also actively committed to the co-processing waste projects in cement kilns. In 2020, Sichuan, Hubei and other cement plants assisted in treating a total of 15,238 tons of domestic wastewater and sludge. Sichuan Yadong and Sichuan Lan Feng have collaboratively disposed of 21,912 tons of drilling cuttings solid waste, as well as 4,551 tons of waste refrigerator insulation materials. Hubei Yadong has disposed of 1,414 tons of contaminated waste limestone powder, and so on.

Waste reduction goal	 Convert waste into resources for comprehensive utilisation, and ultimately achieve zero waste discharge. Reduce the amount of waste engine oil, cables and batteries.
Measures adopted	 Sort wastes from the production process into kilns for incineration, into mills for material proportioning and other reuse models. Strengthen daily maintenance of batteries, use high-performance batteries, and extend battery life and replacement cycles. Purchase better quality lubricating oil, reduce the frequency of equipment oil change and extend oil change intervals. Recycle the replaced lubricating oil with better quality for secondary lubrication of mechanical equipment.
47	Sustainable Mines Low-carbon Green Intelligent Recycling Economy Manufacturing Sustainable Sustainable Governance
	Overview Green Sustainable Sustainable Governance

Performance of cement kiln co-processing waste in 2020:



Disposal method and volume of general waste in 2020::

Type of Wastes	Disposal method	Wastes Disposal (ton)
Type of Wastes	Disposal method	2020
Household wastes	Burned in kiln / sent to environmental sanitation station	1,059
Waste soil, gravel, waste concrete, and test blocks	Used in the raw mill as grinding ingredients	5,664
Refractory bricks	Bidding/outsourcing	1,039
Waste metal	Recycled and auctioned	524
Waste paper	Recycled and auctioned/Burned in kiln	2
Waste belts and tires	Manufacturing of Stopper Rubber/Recycled and auctioned /Burned in kiln	45
Waste lubricating oil and engine oil	Recovery for lubrication of scraper, disk conveyer, etc.	107
Waste chemical test solution	Discharge after pretreatment and neutralization of wastewater Sewage treatment tank	2
Waste cable and batteries	Entrusting a qualified third party	9
waste wood and metal bucket	Entrusting a qualified third party	21
	Total	8,471

Environmental Education

Social Care



Based on the sustainable development strategies on the social aspect of "create a happy work place, support the vulnerable groups, promote the fine culture, and create a harmony society", Asia Cement (China) will accomplish its social care mission of becoming "the first choice partner for building a sustainable green home" by community activities, donation to the vulnerable groups, human science education and ecology environment protection. This helps us to promote the positive energy throughout society.

·····

Focusing on the community and becoming a partner that grows together with the community help to create a win-win situation, which can be linked to the sustainable growth of Asia Cement (China). At the beginning of each construction, we will conduct impact assessment on the community where our factory operates, continuously discuss with the community to reach consensus, make efforts in the community development plan and other activities. By doing so, we will achieve our social care mission of becoming "the first choice partner for building a sustainable green home", and continue to pass it on. **※** Specific Actions and Initiatives:

Care for the Vulnerable Groups

- Participate in public welfare activities
- Reaching out to vulnerable groups
 Employees help each

other

- Support to Education Undertakings
- Support school construction
- Support campus activities
- Award outstanding teachers and students



Community Infrastructure Construction

- Support community activities
- Assist post-disaster reconstruction of surrounding villages
- Support community's public welfare undertakings

Poverty Alleviation

- Support the construction of poverty-stricken villages
- Provide subsidies to financially difficult families

Evaluation Methods

② We evaluate our social expenditure items and expense breakdown, which is collated by the CSR Committee and submitted to the committee chairperson for approval.

(1) We keep tracking the attainment of our action plans through the CSR report.

Policy and

Commitment

Asia Cement (China) provides all necessary assistance for the caring and education of underprivileged groups.

Sustainable Mines Low-Carbon Green Intel Manufacturing Overview

Low-carbon Green Intelligent Recycling Economy
Manufacturing Green Sustainable

Circulation 4

Social Care

48

Environmental Education

Social Care

CSR 2020企业社会责任报告 corporation social report

4.1 Community Activities and Care for the Vulnerable Groups



Community Activities Asia Cement (China) has always insist on the integration of corporate development and social responsibility. The company actively participates in various poverty alleviation and public welfare, and has repeatedly funded surrounding villages to build roads, green barren hills, and help the needy. We also actively promote friendly interaction between each company and the local community, fully create sustainable development strategy, so as to contribute to the harmonious development of the society.

In 2020, subsidiaries of Asia Cement (China) have donated cement, concrete, gravel, mountain flou and other goods RMB3,113,462.19 to the neighboring communities in a total of 20 times.

NO.	Company	Donor	Donation	Value
1	Jiangxi Yadong	Hedong Township People's Government of De 'an County, Jiujiang City	Cement donation	¥1,236,725.84
2	Jiangxi Yadong	Ruichang city, Hongxia township Dawu Feng village	Cement donation	¥18,950.57
3	Jiangxi Yadong	Ruichang City River Bureau	Cement donation	¥4,285.12
4	Jiangxi Yadong	Xiafan Village, Xiafan Town, Ruichang City	Cement donation	¥16,971.03
5	Jiangxi Yadong	Tuanjie Village, Ma-tou Town, Ruichang City	Cement donation	¥33,389.88
6	Jiangxi Yadong	Jiujiang Taiwan Affairs Office	Cement donation	¥62,783.79
7	Huanggang Yadong	Lanzhou community	Cement , gravel and mountain flou donation	¥124,935.19

Low-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 4

Sustainable Mines

Overview

NO.	Company	Donor	Donation	Value
8	Huanggang Yadong	Poverty Alleviation Village, Wuxue City	Cement donation	¥49,005.81
9	Huanggang Yadong	Jinniu-hu, Hongyang-hu embankment, Lanzhou community	Cement and mountain flou donation	¥53,375
10	Huanggang Yadong	Meitang Village, Wanglong Village, Wuxue City	Cement donation	¥534,505.19
11	Jiangxi Yali	Nanxia Village, Garden Township, Ruichang City	Cement donation	¥9,300
12	Wuhan Yaxin	Lingang Village, Zhifang Street, Jiangxia District	Cash	¥30,000
13	Wuhan Yaxin	Zhushan Village, Anshan Street, Jiangxia District, Wuhan City	Cement donation	¥27,936.41
14	Sichuan Yadong	People's Government of Lichun Town, Pengzhou City	Cement gravel donation	¥21,818.81
15	Sichuan Yadong	People's Government of Bailu Town, Pengzhou City	Cement donation	¥247,921.46
16	Sichuan Yadong	Zhoujia Community, Tianpeng Town, Pengzhou City	Cement donation	¥5,298.22
17	Sichuan Yadong	Lichun Town adn Zhoujia Community, Pengzhou City	Cement donation	¥265,449.87
18	Sichuan Yadong	People's Government of Tongji Town, Pengzhou City	Cement donation	¥169,333.84
19	Sichuan Lanfeng	Shimen Village, Osmanthus Town, Pengzhou City	Cement donation	¥41,854.65
20	Sichuan Lanfeng	Hongshiqiao Village, Osmanthus Town, Pengzhou City	Cement donation	¥159,594.51
	¥3,113,462.19			

Recycling Economy ustainable Governan Circulation Social Care

Environmental Education

● CSR 2020企业社会责任报告 corporation social report

Public welfare donation

In 2020, the subsidiaries of Asia Cement (China) made 7 donations in materials and cash, totalling 4,965,000 RMB, to fulfil corporate social responsibilities.

NO.	Company	Donor	Donation	Value		
1	Hubei Yadong	Wuhan Charity Federation	Cash	800,000		
2	Hubei Yadong	Wuhan Xinzhou District Charity Association	Cash	3,000,000		
3	Huanggang Yadong	Lanzhou Community of Tianzhen Office	Grain and oil	¥140,000		
4	Huanggang Yadong	Wuxue Municipal Government	Cash	¥1,000,000		
5	Nanchang Yali	Command Centre for Epidemic Prevention and Control of Nanchang Municipal	Cash	¥10,000		
6	Yangzhou Yadong	Yangzhou Municipal Government, Charity Federation	Cash	¥10,000		
7	Yangzhou Yadong	Yangzhou Economic Development Zone Charity Association	Cash	¥5,000		
	Total					

() Reaching out to Vulnerable Groups

Jiangxi Yadong



Provided RMB33,780 in total since 2019 to Miss Wangs for their tuition fees and living expenses which ensure their completion of studies.

- Supported the residents of Tianzhen in the fight against the coronavirus epidemic by purchasing 140,000 RMB-worth of grain, oil and other materials, and extending condolences to the residents of the Tianzhen neighbourhood committee, Lanzhou Community, Tianzhen Office.
- ② Supported flood relief and post-disaster reconstruction in the Wuxue region by donating 3,000 tons of PC42.5 cement, worth about 1.08 million RMB, to the Wuxue Municipal Government.







Care for the Vulnerable Groups



In 2020, the total budgets prepared were about RMB430,000 (only the cash portion of annual budgets prepared for emergency relief, excluding the physical budget), for contributing to post-disaster reconstruction and for emergency relief and vulnerable groups. Asia Cement (China) cares in every moment for the elderly singletons and underprivileged families in urgent need and actively organizes various donation and charity activities to help the vulnerable groups get out of the plight. Also, taking the advantage of subordinate production enterprises, Asia Cement (China) provides material and manpower support for villagers, such as building bridges and roads.

Asia Cement (China) prepares budgets for emergency relief annually.

 Sustainable Mines
 Low-carbon Green Intelligent Manufacturing
 Recycling Economy
 Social Care
 Environmental Education

 Overview
 Green Sustainable Circulation 4
 Sustainable Governance Circulation
 Appendix

Employees Help Each Other	_	Times of mutual	Amount of mutual
Other	-	donations	donations (RMB)
In a bid to carry forward its motto of "mutual assistance, helping	2018	5	173, 663
those in need and delivering care", we organized a total of 4 staff donations for mutual support in 2020, raising	2019	11	172, 225
RMB180,548 to help 4 staff members and their families go through	2020	4	180, 548
difficulties.			

4.2 Support to Education Undertakings

Asia Cement (China) focuses on education. Since its establishment, the Company has provided goods and financial assistance for many times, and supported for the development of school education and teaching too.

Low-carbon Green Intelligent

Manufacturing Green Sustainable

Circulation 4

- In September 2019, We respectively donated 50 tons and 100 tons of PC42.5 cement, about RMB63,836, to Matou primary and secondary schools for the construction of ancillary facilities around the experimental building.
- In May 2020, Hubei Yadong donated 800,000 RMB for epidemic prevention to the Wuhan Qiyi Huayuan Middle School through the Wuhan Charity Federation.
- In September 2020, at the request of the Lanzhou community, Huanggang Yadong donated 50 tons of PC42.5 cement (approximate value 24,000 RMB) to the Tianzhen Central Primary School to support the renovation of its facilities.

Sustainable Mines

Overview





Social Care

Appendix

Xin Xing Yadong Hope Primary School (新兴亚东希望小学)

During the Wenchuan earthquake on 12 May 2008, the schools located at the hardest-hit areas of Pengzhou City suffered serious damage and were in most urgent need of reconstruction for maintaining normal educational activities. In order to implement the Company's long-standing concept and fulfill corporate social responsibility, we decided to donate RMB15 million for supporting the construction of the Xin Xing Yadong Primary School in Pengzhou City, which was completed and formally opened for the purpose of education on 1 September 2009 as scheduled. In order to encourage teachers and students of Yadong Primary School to spend great efforts in teaching and learning and making a firm determination to become successful, we set up the "Employee Care Education Fund" by appropriating part of the monthly salary of every executive in Sichuan Yadong as charitable contributions. The Fund will be utilized on a dedicated-fund-for-dedicated-use basis, for recognizing the outstanding teachers and students selected on Teacher's Day and Children's Day by the school every year. on that day, Sichuan Yadong will send designated personnel to Xin Xing Yadong Primary School for attending the "Teacher's Day" and "Children's Day" celebrations, at which ten distinguished teachers and thirty outstanding students will be selected, and each teacher will be awarded RMB1,000 and each student will be awarded RMB200.

Recycling Economy

Circulation

Environmental Education

4.3 Humanistic Science Education

Education is the fundamental task for generations to come. Asia Cement (China) continues to introduce corporate resources, focuses on humanistic science education and cooperates with Yuan Ze University and Yadong Technical College under the Far East Group to carry out the cooperative education. We has promoted industry-academy internships and talents reserve plans, brought in new blood and revitalized the human resource structure, and it has also cooperated with some professional cement colleges and universities in China to help the students cultivate their abilities to combine theory with practice. After the practical experience activity, the guests and students benefited a lot and were widely praised. Which will lay a solid foundation for them to adapt to their work environment and workplaces and integrate into the working team.

Currently, many young people choose to attend the vocational schools, because the vocational schools cooperates with relevant industries to carry out "industry, academic and research" collaboration for mutual development, in addition to preparing young people with skills early. It presents a multi-win situation for the future employment of students, schools' grasp of market demand, and the exploration of talents in the industry. In view of this, Asia Cement (China) and its subsidiaries welcome all organizations from all walks of life and schools to visit the Company, and the Company is willing to make plans for related study activities.

> In February 2020, Mining engineering students from the School of Environment and Resource of Southwest University of Science and Technology visited the mines of Sichuan Yadong.

> > In July 2020, Teachers and students from Wuhan University of Technology majoring in inorganic nonmetallic materials came to visit our company for practice.

In July 2020, Mining engineering students from the School of Inorganic Non-metal Material of Southwest University of Science and Technology came to Huanggang Yadong for practice.

The fist group of works unit, the first plant of quality unit, and the second plant of manufacturing section in Jiangxi Yadong are recruited respectively of students . Currently, they are still in the internship, and the post salary is normally paid.

Sustainable Mines

Low-carbon Green Intelligent

Manufacturing

Overview

4.4 Social Care Expenditure

Social Stabilization Expenditure

In 2020 Asia Cement (China) spent a total of approximately RMB11.87million in social expenditure. The main expenditure categories were community construction of approximately RMB6.3 million, accounting for approximately 53%.







Asia Cement (China) is committed to building a "garden-style factory". It is committed to the concept of greening empty spaces and no wasteland in the factory area, striving to offer a good working and leisure environment to its staff.

Asia Cement (China) actively implement the ""green mountains and clear water are the most precious assets"" strategic policy, and firmly uphold the concept of respecting, complying with and protecting nature.We actively responded to the government's environmental protection policy to promote environmental sustainability, with heavy investments in manpower, materials and financial resources. Each company has set up its special unit as well as green technology staff and workers to grow green plants in living quarters, factory areas and both sides of the road, as a way to demonstrate our commitment to environmental sustainability.

Evaluation
MethodsEach company is equipped with environmental preservation
professionals to assess the effectiveness of its plan based on the
implementation of environmental protection programs.Policy① Protecting the ecosystem and raising the awareness.

and

Commitment

Protecting the ecosystem and raising the awareness.
 Providing free guided tours and commentaries on environmental preservation.

※ Specific Actions and Initiatives:



5.1 Greenery Cultivation

Social Care

Appendix

Asia Cement (China) promotes the formation of green development and lifestyle. In order to realize the harmonious development between man and nature, the Company actively cultivates green plants. There is a flower garden and seeds cultivation center in Jiangxi Yadong, Huanggang Yadong, Nanchang Yadong, Hubei Yadong, Sichuan Yadong, Sichuan Lanfeng. It is equipped with greenhouses, shady nets and other facilities to cultivate a variety of seasonal flowers. Strive to build a green home, do a good job in planting green, protecting green, loving green and flourishing green.



Environmental Education

Environmental Education

2020企业社会责任报告 corporation social report

Company	Green plant cultivation performance in 2020	Cost (RMB)
Jiangxi Yadong	Planted wisteria, acacia, parthenocissus, parthenocissus laetevirens, osmanthus, camphor tree, cypress, Chinese tallow, crabapple, ryegrass, Festuca elata Keng ex E. Alexeev, Paspalum wettsteinii Hack., Pennisetum alopecuroides (L.) Spreng, Chaenomeles cathayensis Schneid., grass seed, Chaenomeles cathayensis, Lagerstroemia indica L., Cerasus yedoensis, Rutaceae, Cuiguan Pear, Photinia serrulata, Loropetalum chinense var.rubrum, Euonymus japonicus 'Aureo-marginatus', Pittosporum tobira, Red Heart Plum, Blueberry, Camellia, Michelia chapensis Dandy, Malus halliana Koehne, Rhododendron simsii, Taiwan grass, Rose, and Taxodium distichum (L.) Rich.	¥2,534,500
Hubei Yadong	Planted Loropetalum chinense var.rubrum, Canna indica L., Manila grass, etc.	¥21,061
Sichuan Yadong	Cultivated camphor trees, sweet-scented osmanthus trees, cedar trees, poplar trees, palm sunflowers, mixed lawns, etc.	¥269,400
Sichuan Cultivated cedar, Fructus Chaenomelis, Loropetalum chinense var.rubrum, Ligustrum vicaryi, Viburnum odoratissimum Ker-Gawl. var. awabuki (K. Koch) Lanfeng Zabel ex Rumpl., Ophiopogon japonicus (Linn. f.) Ker-Gawl., Cosmos bipinnata Cav., Papaver rhoeas L., Rhododendron simsii Planch., Cerasus yedoensis, etc.		¥68,760
	Total	¥2,893,721

5.2 Jiangxi Yadong's Mine Agriculture Park

The Jiangxi Yadong Mine Ecological Agriculture Park is located in the northeast corner of the Company's limestone mining area and covers an area of more than 150 acres. The Company adheres to the ecological concept of "green mountains and clear water are equal to mountains of gold and silver" and the concept of the Yangtze River Economic Belt to step up conservation of the Yangtze River and prevent over-development. We attach great importance to these concepts, and organise vigorous implementation, with a total investment of more than 10 million RMB for positive transformation. In addition to retaining the original office area, we have constructed a vegetable area, fruit garden, aquatic area, poultry area, green recreation area, etc., and have successfully turned the disused industrial ground" into an "ecological leisure and agricultural park". Nowadays, seasonal vegetables such as water spinach, Chinese cabbage, cabbage, yam, sweet potato, etc. are planted in the vegetable area of the ecological agricultural park; fine varieties of fruit trees such as peach, nectarine, pear, grape, loguat, citrus, and persimmon are planted in the fruit garden; high-quality fish species such as crucian carp, silver carp, bighead carp, grass carp, bream, carp, etc. are bred in the aquatic area; common poultry such as chickens, ducks, and geese are raised in the poultry area; the greening recreation area includes local flowers and plants such as Loropetalum chinense var.rubrum, Photinia serrulata, Tradescantia pallida (Rose) D. R. Hunt, Dianthus barbatus L., etc. In the park, flowers blossom in all seasons, fruits and vegetables are available throughout the year, and people can fish at all times. In short, people live in harmony with nature. Furthermore, through the adoption of standardised construction such as pipe network configurations and automatic sprinkler irrigation systems, as well as the use of farm manure, we grow seasonal vegetables with less labour and greater production. In 2019,

we harvested 60,000 kg of various agricultural products, which grew to 90,000 kg in 2020. We have achieved good economic and ecological benefits. Pleasant scenery attracts guests. Since the establishment of the Ecological Agricultural Park, governments at all levels, relevant authorities and mining companies have visited over 80 times for investigation, guidance, and tours. Chen Xiaoping, the Vice Governor of Jiangxi Province, and Zhang Shengze, the Director of the Department of Natural Resources of Jiangxi Province, as well as other related leaders, offered high praise and said that our construction model should be promoted to a benchmark model.

In order to implement national development around the ecological civilization concept of "green mountains and clear water are equal to mountains of gold and silver", in 2020 the greenhouse nursery cultivated 28,371 plants of wisteria, camphor trees, acacias, tallow trees, osmanthus, Parthenocissus tricuspidata, Parthenocissus laetevirens Rehd., etc. under the guidance of the Company's leaders and through hard work, of which 9,045 were transplanted to mining areas, and the remaining 19,326 seedlings were transplanted to surrounding fourth-level construction fields and the nursery. They will be transplanted to the mining area after they have grown. In the future, the Company will continue to explore and cultivate tree species suitable for local growth, to better green and beautify the mines, and contribute to beautifying China with the strength of Yadong.







 Sustainable Mines
 Low-carbon Green Intelligent Manufacturing
 Recycling Economy
 Social Care
 Environmental Education

 Overview
 Green Sustainable Circulation 5
 Sustainable Governance Circulation
 Appendix





Sustainable Governance Circulation PART THREE



Circulation

ort < 🥶

Corporate Governance--Management Policy

With the operation concept of "high quality, high efficiency, high environmental protection, and low cost," Asia Cement (China) not only produces high quality products but also is proud of upholding the highest environmental standard and high efficient production. Besides the cement business, Asia Cement (China) also engages in marine transport and cement mix businesses. It endeavors to create the best value for the Company and biggest interest for the shareholders by integrating relevant resources in the multi-angle operation and to become the first choice partner for building sustainable green home.

1.1 Corporate and Governance Overview

Asia Cement (China) operates its business with the principal of sincerity and strives to improve the governance structure of the Company so as to perform its sustainable operating responsibilities. A healthy and efficient board is the governing basis to govern a company well. The Board is committed to maintaining high standards of corporate governance practices to safeguard the interests of the Company's shareholders. Audit Committee, Remuneration Committee, Nomination Committee and Independent Committee were set up under the Board to assist the Board performing company governing rules. Company website have set up special column of investors' relations as a pipeline of delivering and communicating information.

Management and Organization Structure of Asia Cement



Corporate Governance

Sustainable ropics wa

Green Sustainable Circulation

Sustainable Action Initiative

Sustainable Governance Circulation 1

Basic Information

Company	Asia Cement(China)Holdings Corporation					
Employees	,885 employees.					
Paid-in capital	RMB9.7 billion					
Establish/listing date	March 2006/2008 (stock code: 00743)					
Main product and service	Different types of "Skyscraper" ("洋房牌") cement and clinker manufactured by Asia Cement (China)					
Chairman /Director	HSU, Shu-tong/WU, Chung-lih					
Headquarters	No. 6 Yadong Avenue Ma-Tou Town, Ruichang City Jiangxi Province					
Main operation sites of ceme production	nt Jiangxi Yadong,Huanggang Yadong,Nanchang Yadong,Yangzhou Yadong, Hubei Yadong, Wuhan Yaxin, Wuhan Yadong, Sichuan Yadong, Sichuan Lanfeng					
Production lines and capacity	Jiangxi Yadong has six production lines with an annual output of 11.30 million tons of clinker and 14 million tons of cement. Huanggang Yadong has one production line with an annual output of 1.65 million tons of clinker and 2 million tons of cement. Nanchang Yadong has one cement mill with an annual output of 0.6 million tons of cement. Hubei Yadong has two production lines with an annual output of 3.30 million tons of clinker and 4 million tons of cement. Wuhan Yaxin has one production line with an annual output of 1 million tons of clinker and 1.5 million tons of cement. Wuhan Yadong has two cement mills with an annual output of 1.8 million tons of clinker and 1.5 million tons of cement. Sichuan Yadong has three production lines with an annual output of 4.95 million tons of clinker and 6 million tons of cement. Sichuan Lanfeng has two production lines with an annual output of 3.8 million tons of clinker and 5 million tons of cement. Yangzhou Yadong has three cement mills with an annual output of 2.3 million tons of cement.					
Net sales	Clinker and cement sales volume: Asia Cement (China) 28,844,000 tons. Clinker and cement sales amount: Asia Cement (China) RMB9,844 million.					
Providing services market	Domestic sales covers Jiangxi, Hubei, Sichuan, Jiangsu, Shanghai, Henan, Anhui, Zhejiang, Fujian, while some are sold for export to Singapore and the US.					
Sales network	Fifteen sale offices in the PRC: Nanchang, Jiujiang, Ruichang, Shanghai, Wuchang, Hankou, Yangluo, Wuxue, Jiangxia, Xinzhou, Xiaogan, Chengdu, Pengzhou, Yangzhou and Taizhou sale offices. Number of distributors in the PRC: 496.					
Main entities of the consolidated financial reports	Jiangxi Yadong, Huanggang Yadong, Nanchang Yadong, Nanchang Yali, Jiangxi Yali, Yangzhou Yadong, Taizhou Yadong, Hubei Yadong, Wuhan Yaxin, Wuhan Yadong, Wuhan Yali, Hubei Yali, Sichuan Yadong, Sichuan Lanfeng, Sichuan Yali, Chengdu Yali, Sichuan Yali					
Country and region	PRC					
	Corporate Governance Happy Workplace Sustainable Topics Management Sustainable Action Initiative 5 Overview Green Sustainable Circulation Sustainable Governance Circulation 1 Appendix 5					

Composition of the Board

The Board of Asia Cement (China) is its supreme governance unit and major operation decision-making center. The Company recognizes the importance of diversification of board members to the corporate governance and effective operation of the Board. The Company adopts the diversification policy for board members to ensure that the board members of the Company achieve proper balance in diversified aspects like skills, experiences and perspectives so as to improve the effective operation of the Board and maintain high standard corporate governance level. The Nomination Committee under the Board is responsible for identifying qualified persons to act as directors based on a series of diversified category and with reference to the Company's business model and specific needs.

The board of directors of Asia Cement (China) is composed of 11 directors who possess the knowledge, skills and accomplishments required to perform their duties. A total of 4 board meetings were held in 2020.

Title	Name	Main Experience
Chairman	HSU Shu-tong	Chairman of Far Eastern New Century Corporation Chairman of Far EasTone Telecommunications Co. Ltd. Chairman of Far Eastern Department Stores Ltd.
Vice Chairman	HSU Shu-ping	Vice Chairman of Far Eastern New Century Corporation Vice Chairman of Far EasTone Telecommunications Co. Ltd.
	CHANG Tsai- hsiung	Advisor of Asia Cement (China) Executive director of U-Ming Marine Transport Corporation Supervisor of Far Eastern New Century Corporation
	WU Chung-lih	CEO of Asia Cement (China) Chairman of Jiangxi Yadong
Executive Directors	CHANG Chen- kuen	Deputy CEO of Asia Cement (China)
	LIN Seng- chang	Executive Director of Asia Cement (China) Business consultant of Asia Cement (China)
	WU Ling-ling	Vice General Manager fo Asia Cement Chairman of Oriental Holding
	TSIM Tak-lung Dominic	Independent Non-executive Director of Asia Cement (China) Non-executive Director of Playmates Holdings Limited
Independent	WANG Wei	Independent Non-executive Director of Asia Cement (China) Former Vice President of China National Materials Company Limited Former Vice President of China Building Materials Federation Former Vice President of China Cement Association
Independent Directors	LEE Kao-chao	Independent Non-executive Director of Asia Cement (China) Former Director of Economic Research Department in Council for Economic Planning and Development Former Director of the Board of Taipei City Bank
	WANG Kuo- ming	Independent Non-executive Director of Asia Cement (China) Former President of Yuan Ze University Former President of Nan Kai University of Technology

Duty of the Board

Under the leadership of Chairman HSU, Shu-tong, the primary responsibility of the Board is to supervise, and through setting up various Committees thereunder, to improve the supervision and decision-making quality of the Chairman. The board of directors of Asia Cement (China) convenes at least once every quarter for the management team's business report. Through dialogue, the board understands any problems encountered in actual operation and urges the management team to make adjustments where necessary. The management of Asia Cement (China) maintains smooth and open communication with the board of directors, and is dedicated to implementing the board's instructions and performing business operations to jointly create the highest interests for shareholders.

Title	Name	Actual attendance	Actual attendance rate
Chairman	HSU Shu-tong	4	100%
Vice Chairman	HSU Shu-ping	4	100%
	CHANG Tsai-hsiung	4	100%
	WU Chung-lih	4	100%
Executive Directors	CHANG Chen-kuen	4	100%
	LIN Seng-chang	4	100%
	WU Ling-ling	4	100%
	TSIM Tak-lung Dominic	4	100%
Independent	WANG Wei	4	100%
Directors	LEE Kao-chao	4	100%
	WANG Kuo-ming	4	100%

58

Corporate Governance

Overview

Happy Workplace Sustainable Topics Management

Green Sustainable Circulation

nt Sustainable Action Initiative

Sustainable Governance Circulation 1



Avoid Conflicts of Interest

According to current Board practice, any material transaction, which involves a conflict of interests due to a substantial shareholder or a director, will be considered and dealt with by the Board at a duly convened Board meeting. The Company's articles of association also contain provisions requiring Directors to abstain from voting and not to be counted in the quorum at meetings for approving transactions in which such directors or any of their associates have a material interest.



Institutionalization of Board and Supervisor Remuneration and Sustainable Performance

The remuneration policy for directors shall be determined by the Remuneration Committee consulted the Company's business performance, individual duties and performance and comparable market statistics.

Corporate Governance

Overview

Happy Workplace

Green Sustainable Circulation

Sustainable Topics Management

Sustainable Governance

Circulation 1



Evaluation of Board Performance

In order to implement corporate governance and enhance the functions of the board, Asia Cement (China)'s Board has worked out the "Board Performance Evaluation Regulations" and published the annual evaluation results on the company website.

Sustainable Action Initiative

Audit Committee

The committee members are appointed by the Board of the Company from nonexecutive directors, and the Committee shall act as the communication bridge for other directors, external auditors and internal auditors (if there was internal audit requirements) in connection with financial and other reporting, internal control, external and internal audit matters and other financial and accounting matters as determined by the Board from time to time and assist the Board to provide independent review in connection with the financial reporting procedures, internal control and the effectiveness of risk management systems of the Company and its subsidiaries, as well as supervise the audit process and perform other duties and responsibilities delegated by the Board.

The Audit Committee comprises Mr. TSIM Tak-lung Dominic (Chairman), Mr. HSU, Shutong, Mr. LEE Kao-chao. There meetings were held by Audit Committee in 2020.Members were present as follows:

Remuneration Committee

The Committee comprises three members appointed by the Board of the Company and most committee members are independent non-executive directors of the Company. The Committee shall review and formulate remuneration structure policy for all directors and senior management of the Company, make recommendations to the Board for its consideration; consult the Chairman of the Board and/or chief executive officer or professional advices if necessary regarding to their remuneration proposals for other executive directors. he members of the Remuneration Committee are Mr. WANG, Kuoming (Chairman), Mr. HSU, Shu-tong and Mr. TSIM, Tak-lung Dominic. The Remuneration Committee convened one meeting in 2020.

Nomination Committee

The members of Nomination Committee (which comprises three members) are appointed and removed by the Board ("Board"). The Committee shall review the structure, size and members (including skills, knowledge and experience) of the Board at least annually, and make recommendations to the Board in respect of any proposed changes to implement the Company's development strategy; identify individuals qualified to act as Board members and make recommendations to the Board on the selection and nomination of the individuals for directorships; assess the independence of independent non-executive directors; make recommendations to the Board on relevant matters relating to the appointment or reappointment of directors and succession planning for directors (in particular the Chairman and chief executive officer).

The members of the Nomination Committee are Mr. HSU Shu-tong (Chairman), Mr. TSIM Tak-lung Dominic and Mr. WANG Wei. Nomination Committee convened one meeting in 2020.

Independent Committee

The Independent Committee comprises Mr. LEE Kao-chao (Chairman), Mr. TSIM Tak-lung Dominic and Mr. WANG Kuo-ming and shall convene at least one meeting annually. Its primary responsibilities include: reviewing all transactions among the Company, Asia Cement Group and Far Eastern Group to ensure that they are conducted on normal commercial terms and in the ordinary and usual course of business of the Group and if necessary, recommending the Board to correct such transactions or cancel them; establishing, where applicable, guidelines for management to follow while conducting continuing transactions among the Company, Asia Cement Group and Far Eastern Group; reviewing and assessing the ongoing relationships of the Company, Asia Cement Group and Far Eastern Group to ensure the Committee guidelines formulated as aforesaid being complied and maintaining such relationship being fair to the Company and analyzing and assessing any potential conflict of interests among the Company, Asia Cement Group and Far Eastern Group. The Independent Committee convened one meeting in 2020.

Title	Name	NO. of attendance/No. of meetings	Title	Name	NO. of attendance/No. of meetings	Title	Name	NO. of attendance/No. of meetings	Title	Name	NO. of attendance/No. of meetings
Chairman	TSIM Tak-lung Dominic	3/3	Chairman	WANG Kuo- ming	1/1	Chairman	HSU Shu-tong	1/1	Chairman	LEE Kao-chao	1/1
Member	HSU Shu-tong	3/3	Member	TSIM Tak-lung Dominic	1/1	Member	TSIM Tak-lung Dominic	1/1	Member	TSIM Tak-lung Dominic	1/1
Member	LEE Kao-chao	3/3	Member	HSU Shu-tong	1/1	Member	WANG Wei	1/1	Member	WANG Kuo- ming	1/1

Corporate Governance

Overview

Happy Workplace Sustainable Topics Management

Green Sustainable Circulation

Sustainable Action Initiative

Sustainable Governance Circulation 1

Compliance with Ethic and Honesty and Anti-corruption

The operation concept of "Sincerity, Diligence, Thrift, Prudence and Innovation" of Asia Cement (China) has been deeply rooted in the mind of the employees. Sincerity represents open-hearted and zealous; diligence means hardworking and considerate; thrift is frugal and simple; prudence implies cautious and accurate. In short, "be honest, clear, inquisitive, and do the best" has become part of the corporate culture. There was no corruption event in 2020.

Code of Conduct of Purchase Business in Asia Cement (China)

Article 5 (Appropriateness of Laws, Compliance and Anti-Bribery) 1. Personnel of purchase business shall develop the relationship with suppliers according to the laws, and comply with all applicable laws and regulations in the business operations. 2. Commitments of the personnel of purchase business to the suppliers must be legally authorized by the Company and shall not be made in the name of an individual. 3. Corruption and bribery are prohibited. All corruption and bribery shall be strictly handled in accordance with the relevant regulations of the Company, and the persons and matters involved in violation of relevant laws shall be referred to the judicial authority for disposal. 4.All staff are forbidden to ask for or accept any pecuniary or nonpecuniary benefit for themselves or for others from the clients or other persons, companies and institutions who have business contacts with the Company.

Code of Conduct of Business Personnel of Asia Cement(China)

Article 6 (Customer Exchanges and Report of Conflicts of Interest) 1. Business-related personnel shall avoid trading with clients who have record of dishonest conducts. When dealing with clients, they shall be made understood and respect the Company's code of ethic and conduct, and will be required to provide written commitments stating that they do not engage in illegal business practices and will not provide unjust benefits or bribes to employees of the Company. When signing a contract, it is advised to establish terms of termination or dissolution of the contract in violation of good faith behavior. 2. When a client has a relationship of private interest with a business personnel or a close member of his/her family thereof, the business personnel shall report on his/her own initiative and follow the avoidance principle during the fulfillment of the business. Business personnel shall not sacrifice the interests of the Company in any way, and seek unjust benefits for themselves, the clients or anyone else.

Method of Settle Illegal and Immoral or Dishonest Behavior Cases The general audit office, acting as the task force of Asia Cement (China), is responsible for the promotion, formulation, supervision and execution of corporate integrity operation policies and prevention programs, coupled with the establishment of internal and external reporting channels, its mechanism as well as the reporting windows on the Company's website to facilitate the implementation of its ethical code of conduct and integrity operation. The head of general audit office accepts reports from colleagues, customers, suppliers and contractors of the Company, including personal reports, telephone reports and letter reports. The general audit office will identify the purposes of reports, collect specific evidences and investigate reporting cases in a confidential manner, with verification via independent channels to protect the whistleblowers. Once reporting cases are verified to be true and the circumstances are serious, the Company will process the relevant cases in accordance with laws or relevant regulations of the Company and disclose the information on public information bulletins, providing appropriate reward for the whistleblowers at the same time.

Happy Workplace

Green Sustainable Circulation

Sustainable Governance

Circulation 1

Sustainable Topics Management Sustainable Action Initiative

Appendix

2020企业社会责任报告

corporation social report

CSR



Early warning principles/policies

We are committed to building a culture of corporate integrity. The culture, as a synthesis of the development of administrative theory and culture, is a comprehensive blend of integrity and relevant concepts and systems, which is also guided by scientific theories. Improve ideological awareness of integrity, using a more complete integrity system that has been honed through many years' practice to form a behaviour principle that both the Company and employees agree and support.

Participation in Association

Asia cement (China) has participated in all kinds of organizations in different ways in order to keep close contact with the community and seek for cooperative sustainable development apart from engaging in core cement industry. Main associations participated include:

Happy Workplace

Green Sustainable Circulation

Company	Association	Identity
	China Cement Association 中国水泥协会	General director
	Investment Association of Jiangxi Province 江西省投资协会	General director
	Jiangxi Association for Quality 江西省质量协会	General director
	ZHONGGUANCUN Green Mine Industry Alliance中关村绿色矿山联盟	General director
Jiangxi	Safety Production Association of Jiangxi Province 江西省安全生产协会	Ordinary member
Yadong	The Entrepreneurs Association of Jiangxi Enterprise Confederation 江西省企业联合会企业家协会	General director
	Jiangxi Institute of Energy Conservation Technology 江西省节能技术学会	Member
	Jiangxi Provincial Building Materials Association 江西省建材协会	Director member
	China Mining Association中国矿业联合会	Member
Huanggang	Wuxue Non-coal Mine Safety Production Association 武穴市非煤矿山安全生产协会	Vice president
Yadong	Hubei Provincial Cement Industry Association 湖北省水泥工业协会	Member
	Jiangsu Provincial Building Materials Association 江苏省建材协会	General director
Yangzhou Yadong	Yangzhou Building Materials Association 扬州市建材协会	Vice director
Tuuong	Yangzhou Concrete Association 扬州市混凝土协会	Mmember
	Taiwan Asset Enterprise Association Wuhan 武汉台资企业协会	General director member
Hubei	Wuhan Xinzhou Enterprises Confederation 武汉市新洲企业联合会	Vice president
Yadong	Hubei Provincial Cement Industry Association 湖北省水泥工业协会	Vice president
	Hubei Provincial Circular Economy Association 湖北省循环经济协会	General director member
Wuhan Yaxin	Hubei Provincial Cement Industry Association湖北省水泥工业协会	Ordinary member
Wuhan Yali	Wuhan Concrete Mortar Association 武汉混凝土协会	Ordinary member
Sichuan	Sichuan Provincial Cement Association 四川省水泥协会	Member
Yadong	Chengdu Enterprise Federation Association 成都企业联合会	Member
Sichuan Lanfeng	Chengdu Building Materials Association成都市建筑材料行业协会	General director

Corporate Governance

Corporate Governance

Overview

Sustainable Topics Management

Sustainable Action Initiative

Sustainable Governance **Circulation 1**

```
Appendix
```

1.2 Products and Economy Performance

Main brand Based on the operating philosophy of "high quality, high efficiency, high environmental protection and low cost", the Company has created an outstanding brand image for the "Skyscraper Brand Cement".



Type of Customer

2020企业社会责任报告 corporation social report

Including distributors, general customers, relationship enterprises, wholesale customers, key projects, clinker and furnace powder customers.

Products and Services

Asia Cement (China) has established production or dispatching bases in Jiangxi, Hubei, Sichuan, Jiangsu, Shanghai and so on for production and supplying to meet customer's needs. The Company has set up 15 business offices in total with sales network covering nine provinces and one city, detailed information of which as following: business office of Jiangxi Yadong locating in Jiujiang, Ruichang, Nanchang and Shanghai; business office for Hubei province locating in Yangluo, Xinzhou, Hankou, Xiaogan, Wuchang, Jiangxia, Wuxue; the business office for Sichuan province locating in Pengzhou, Chengdu; business office for Jiangsu province locating in Yangzhou, Taizhou. Each business unit is equipped with professional staffs for assisting sales and after-sales service, which has further enhanced the service efficiency of production and sales.

Business Units and Distributors

Business units: We have 15 business offices in China include: Nanchang, Jiujiang, Ruichang, Shanghai, Wuchang, Hankou, Yangluo, Wuxue, Jiangxia, Xinzhou, Xiaogan, Chengdu, Pengzhou, Yangzhou and Taizhou.

Distributors: There are 496distributors in China.



Corporate Governance



Financial performance

Due to the greater impact of the epidemic in Wuhan and surrounding areas in 2020, the Company completed a total sales volume of 28.84 million tons of cement and clinker, a decrease of 5.3% from 2019. Prices in the main sales areas of the group have been operating at relatively high levels. In 2020, the Company made a profit of 2.75 billion RMB.

Facing modern changes, in 2021 the Company will continuously adhere to the business strategy of high-efficiency, high-quality, high-environmental protection and low-cost, while seeking innovative breakthroughs and further promoting intelligent, digital, and green development. The Company will also innovate in profit growth points by practicing the long-standing corporate culture of "Integrity, Diligence, Austerity, Prudence and Innovation".

In 2020, the distributable earnings per share (EPS) of Asia Cement (China) was 1.703 RMB. The board of directors recommended a cash dividend of 0.511 RMB (the proposed final dividend for the year must be approved by the Company's shareholders at the forthcoming annual general meeting), with the dividend ratio reaching 30 %.

CSR

2020企业社会责任报告

corporation social report

The dividend payout ratio of Asia Cement (China) maintains at a high level of above 20% and the dividend yield ranges from 1.4%-10.5%. We create values for investors continually by adopting steady high dividend distribution policy.



<financial performance (based on the combined financial statements)>

Green Sustainable Circulation



Corporate Governance

Overview

Happy Workplace Sustainable Topics Management **Circulation 1**

Sustainable Action Initiative

Sustainable Governance

CSR 2020企业社会责任报告 corporation social report







Combined Financial Statements of Asia Cement (China)

The stable below set out the combined financial statements from 2018 to 2020:

Year Item	Unit	2018	2019	2020
Operating revenue	RMB'000	11,330,347	12,608,716	10,823,753
Operating costs	RMB'000	6,943,932	7,289,590	6,304,971
Operating gross profit	RMB'000	4,386,415	5,319,126	4,518,782
Net operating profit	RMB'000	3,624,065	4,443,163	3,686,613
Non- operational balance	RMB'000	(240,915)	(93,083)	148
Profit before tax	RMB'000	3,383,150	4,350,080	3,686,761
Income tax expenses	RMB'000	882,360	1,119,984	936,352
Net profit for the current period	RMB'000	2,500,790	3,230,096	2,750,409
Surplus per share	RMB	1.545	2.009	1.703
Total assets	RMB'000	20,722,346	23,985,754	21,634,251
Total liabilities	RMB'000	8,280,000	9,342,760	5,103,023
Total equity	RMB'000	12,442,346	14,642,994	16,531,228

Corporate Governance
Overview

Happy Workplace Green Sustainable Circulation

Sustainable Governance

Sustainable Topics Management

Circulation 1

Sustainable Action Initiative

Internal Control and Risk Management System

In order to reinforce risk management, Asia Cement (China) has formulated a series of internal risk management solutions and internal control self-evaluation process and methods which are implemented by the board of Directors, managers and employees, aiming at promoting the robust operation and ensuring the accomplishment of goals in a reasonable way.



Internal Control and Risk Management Framework:

Risk management of the Company and the subsidiaries.	First defense	Risk supervision and manageme	 ①Establish risk- oriented internal control system. ②Establish corporate operation risk indicator. 	 ①Control and the management of the risk of overall operation procedure. ②Measure the risk of overall operation of the enterprise.
Assurance of the ongoing effectiveness of the design and implementation of the internal control system.	Second defense	Implementation of internal control and self- assessment of risk.	Implement internal control and conduct self-assessment of internal control risk by each unit.	 Ensure effective implementation of internal control. Achieve goals of the self-control of internal control risk.
Reasonable assurance of the achievement of goals of internal control system; effect and efficiency of the operation and report being reliable, timely, transparent and compliant with relevant regulations; compliance with relevant laws and regulations.	Third defense	Reasonable assurance of risk and control.	Carry out supervision among subsidiaries and audit self-assessment report of operation review.	 Consultation on internal control management. Verification of internal control effectiveness. Advise and follow-up on defects of internal control.

In order to ensure the implementation of relevant regulations and create a more virtuous development atmosphere for the Company, the Company begins from the training level, actively promoting a culture of integrity, and conducting professional ethics and anticorruption training for

employees. At the same time, we regularly conduct publicity and educational training for key business departments and key or sensitive positions. In this way, we raise awareness of laws, regulations and policies, warn the employees with

examples of major cases, and

strengthen their professional

Audit the occupational safety

the personal safety

and contractors.

and operation work to increase

maintenance of the employees

Directors for approval according to the laws.

稽核项目 management Anti-corruption Production training 及说明 **Corporate Governance**

Customer relations

enseement

Asia Cement (China) has specific audit department in charge of promoting and supervising the

establishment of internal control system by each company for the purpose of maintaining an

effective risk control; checking and assessing the effectiveness and sufficiency of internal control

system in each company and supervising the effective implementation of internal control system;

performing regular and special audit plans and following up the improvement on the defects and irregularities of the internal control systems of the companies under investigation to ensure the ongoing effectiveness of design and implementation of internal control system while maintaining and increasing the overall interest of the enterprise. The annual audit plan, audit report and

corporate sustainability issues will be presented by Asia Cement (China) each year to the Board of

Audit Items of Risk Identification

Audit relevant customer complaints in operation and production departments to make sure the appropriate treatment of customer complaints by operation and production departments and make recommendations thereon.

Conduct control over production efficiency and operation, and coordinate advices of production units and promote the communication.

1. Corporate governance

- 2. Audit the meeting procedure of the Board of Directors and make sure that its operation complies with the requirement of laws.
- 3. Audit transactions of associates and make sure that their purposes, prices and conditions are reasonable and their information disclosure is appropriate.
- 4. Implement the control system of internal material information processing and make sure such system follows the related regulations of the Company.
- 5. Audit the operation of Remuneration Committee and make sure that its operation complies with requirements.

Corporate Governance

Overview

Happy Workplace

Green Sustainable Circulation

Sustainable Topics Management Sustainable Action Initiative

Sustainable Governance

Circulation 1

ethics.

1.3 Climate Change Adaptation and Mitigation

Changing risks and opportunities

In response to the risks and opportunities brought about by climate change, Asia Cement (China) not only assesses and manages various risks in accordance with the Practice Policy for Corporate Social Responsibility, but also formulates, identifies, evaluates and executes a response plan in the face of climate change. This enables us to enhance our ability to adapt and mitigate the impact of climate change by formulating a correspondingly adjusted action plan based on the results of the risk analysis while exploring business opportunities likewise derived from it.



Climate change risk and opportunity assessment and action plan of Asia Cement (China)

Risk Type	Item	Climate-related risk	Risk management and action plan
Transforma tion Risk	Regulation	Gross control and carbon tax of the Greenhouse Gas Reduction and Management Law	Implement energy saving and carbon reduction; purchase renewable energy certificates
	Technology	Alternative raw materials/fuel technology	Promote the Smart Manufacturing Cement 4.0 plan and low-carbon cement processes, and realise a resource-recycling society
	Market	New product development and changes in customer needs	Analyse the pros and cons of product substitution, balancing the risks and competition with other materials
Substance Risk	Imminent	Affect production facilities or transportation, causing operating losses	Develop emergency disaster response plan
	Long-term	Transportation of raw materials, etc. are susceptible to climate change	Continuously monitor climate-related risks

Opportunity type	Climate-related opportunity	Opportunity management and action plan
Products and services	Research and development of special cement, etc. Rebuilding after extreme climate change.	Innovative and sustainable product development, to increase market capacity for high-standard and special cement. Business opportunities from post-disaster reconstruction needs.
Supply chain/Value chain.	"Waste treatment", choose to dispose of municipal refuse, sludge, industrial hazardous waste, etc. in a co-kiln.	Increase various procurement methods for alternative raw materials; improve resource substitution and diversity; plan for sustainable mines and expand the scope of business.
Adjustment and mitigation	Intelligent manufacturing 4.0, the five- year plan for cement plants.	Grasp the harm of climate change to Asia Cement (China) through risk assessment and propose improvement plans.
Investment and R&D	Establish relevant optimisation systems and intelligent inspection, production, and automatic control systems.	Combine cement Internet+ with AI systems to confirm the implementation of plans and goals, and formulate management policies and establish important performance indicators.
Operation management	Business strategy incorporates climate change consideration.	Increase investment in research and development of low- carbon products and improve production processes.

Overview

Corporate Governance

Happy Workplace

Green Sustainable Circulation

Sustainable Governance Circulation 1

Sustainable Topics Management

Sustainable Action Initiative





Climate strategy

Climate change poses major risks for Asia Cement (China). According to the national control targets for greenhouse gases, Asia Cement (China) assessed the adoption of reduction strategies and targets in the future:

- 1. Identify the risks and opportunities for Asia Cement (China) from short-, medium- and longterm climate changes.
- Implement the low-carbon transformation plan through both mitigation and adjustment; incorporate energy-saving, carbon-reduction and energy efficiency as important operational goals and strategies of Asia Cement (China) to mitigate financial impacts.
- Adjust the climate change scenario of Asia Cement (China) to be in line with the national carbon reduction target.
- 4. Establish important performance indicators for management, such as reducing unit consumption of cement grinding by 10%, or reducing cement emission intensity by 20% by 2030.
- Fully expose the greenhouse gas emissions and risks within the scope of Asia Cement (China).
 Set and disclose the key performance indicator achievements of Asia Cement (China).

Practical actions in climate change adaptation and mitigation:

Mitigation

- 1. Ongoing participation in the voluntary production reduction plan entered into between Ministry of Industry and Information Technology and associations.
- 2. Alerting of environmental protection and energy saving by the Company and plants to enhance the awareness of energy saving.
- 3. Active participation in carbon emissions trading and continuous promotion of energy saving and carbon reduction.
- 4. Establish a real-time monitoring and forecasting system for pollutant discharge to effectively manage and prevent air pollution.
- 5. Being committed to the development and the promotion of innovative and sustainable product, including the promotion of high grade cement and other products like gravel, aggregate.
- 6. Continuous promotion of water resources management.

Adaptation

1. Formulation and corresponding implementation of "Measures on Emergency Reporting and Management of Crisis Events" and "Response Approaches to Material Disaster Crisis".

- 2. Assess risk coverage to mitigate the financial and managerial impacts of climate change.
- 3. Timely adjustment of development strategy by examining current and expected national climate change policies, including pollutant emission limits, energy efficiency standards, carbon emissions trading, process or product standards, mandatory participation in trading mechanisms, etc., to analyze the possible impact of various regulatory contexts on business operations.



Other disaster risk management

Asia Cement (China) has always had disaster risk management mechanisms supported by a preventive management attitude. It has formulated the Management Measures for Emergency Notification of Crisis Incidents and Major Disaster Crisis Response Measures to avoid or reduce possible personnel injuries, system equipment damage, loss of property and loss through operational shutdown. In addition to actively participating in various drills sponsored by organisations at all levels, Asia Cement (China) also conducts occasional disaster prevention drills. It mobilises employees to participate in fire drills on a regular basis every year to strengthen their emergency response capabilities with the aim of controlling accidents and eliminating hazards. Emergency drill for drowning emergencies in the Jiangxi Yadong port affairs team





CSR 2020企业社会责任报告 corporation social report





Supplier Conduct Guidelines

2020企业社会责任报告 corporation social report

Compliance with regulations

We strictly observe government regulations and require our suppliers to comply with such regulations, with no forced labor, child labor, illegal workers or prohibited raw material.

Data authenticity

All documents concerning transactions shall be authentic, legal, complete, valid, and no forgery.

Fair competition

The supplier shall not infringe our rights and interests through fixing the selling price alone or in collusion with others, bid-rigging, bundling and abuse of market dominance.

Honest and trustworthy

The supplier shall not attempt to offer employees of the Company and their relatives a bribe (including pecuniary or non-pecuniary interests) to gain improper interests. The supplier also shall not offer any gifts or treats to employees of the Company or their family members and relatives for the purpose of gaining unfair advantages, which may have an adverse impact on the business decision of the Company.



Communication and implementation

🔅 i

1.5

Ū

The supplier shall communicate this code to its employees and subcontractors and explain related rights and interests to them.

The Company encourages its supplier to establish a management system in compliance with the requirements of this guideline. The supplier shall appoint a senior management to inform the Company of matters not in conformity with the provisions of this guideline on an ongoing basis.

Happy Workplace

Green Sustainable Circulation

Subcontract responsibility

Without the written approval of Party A, the supplier shall not engage subcontractors. The approved subcontractor or transferee shall issue a written consent of accepting this code, which is also applicable to them.

Confidentiality of information

The supplier shall guarantee and maintain the confidential and proprietary information of the Company, and such information shall be used only for the purposes authorized by the Company.

Treatment for breach of guidelines

If the supplier breaches any guidelines above, the Company may, at its own discretion, retain the rights to suspend or terminate the procurement from the supplier due to all losses to the Company resulted from the breach of such guideline by the supplier.

Interest relevance

The supplier shall disclose any potential conflicts of interest to the Company, and if any employees of the Company or their family members and relatives have any interest in the businesses with the supplier or any kind of economic relationships with the supplier, the supplier shall disclose such information to the Company.

Q

Corporate Governance

Sustainable Topics Management

Sustainable Governance

Circulation 1

Appendix

Sustainable Action Initiative
Supplier Evaluation



We conduct annual evaluation on materials, engineering, sevice, and semi-annual evaluation on raw materials with detailed records to rate them as "Grade A (outstanding)", "Grade B (qualified)", "Grade C (to be observed)" and "Grade D (ruled out)" as a basis for supplier selection.

A separate in-depth investigation will be conducted on suppliers rated as "Grade C (to be observed)", and a letter will be sent requesting an improvement once any poor condition is discovered. Suppliers rated as "Grade D (ruled out)" cannot be admitted to qualified suppliers within two years, and a letter will be sent to inform the cancellation of supply qualification.



1

The suppliers to whom we have made prepayment for purchases are strictly controlled, and are required to, among others, provide equivalent performance bond and retention fund, to mitigate the purchasing risks.

The potential and existing manufacturing suppliers will accept relevant evaluations in terms of: basic conditions, manufacturing capacity, technical capacity, quality control capacity, timeliness of delivery and supporting services. In addition to the above, suppliers of engineering services will also accept relevant evaluations in terms of business management, accidents in the last year, contribution of five social insurances and one housing fund for employees as well as bad records over the past year.

Green Sustainable Circulation

2020 Evaluation Practice for Raw Material Supplier

Quality Control- Price-Regulation	 Quality confirmity rate-return rate On-time delivery rate Provision of reasonable price Green environment protection/social responsibility Labour condition and environment complying with regulations
Level of Cooperation-After sales-Reputation	 Level of cooperation-Speed of cooperation in settling when occurred problems After sales service Financial status and cash flow capability

- Manufacturing-Technology-Relationship
- Manufacturing capability/terms and degrees of automation of manufacturing equipment
- Technology capability/proportion of R&D personnel of the Company, technicians' average education level and on-the-job training
- Quality control capability/inspection of the raw materials in or out the factory and finished products, records of production quality control, establishment and implementation of standards

Number of suppliers by region



Corporate Governance

Overview

Happy Workplace

Sustainable Topics Management

Sustainable Action Initiative

Sustainable Governance

Appendix

Circulation 1

CSR ²⁰²⁰企业社会责任报告 corporation social report

Identify and monitor environmental and social risks to the supply chain

Potential suppliers should abide by national laws and regulations. Purchasing units check whether suppliers have previous violations or untrustworthy records in the National Enterprise Credit Information Publicity System. In addition, they implement the supplier's on-site evaluation system and require selected suppliers to sign a responsibility statement. Meanwhile, the Company clearly stipulates relevant provisions in contract templates, to form a complete closed loop of management and ensure control of environmental risks.

Asia Cement (China) has been rated as an honest and trustworthy enterprise for several consecutive years. Each subsidiary maintains a good relationship with the local government, promotes the virtue of being good neighbours, and guides local partners to abide by the law. For example, suppliers shall not use child labour and shall not owe employee salaries, but shall protect employees' occupational health and safety during production. We thus actively fulfil corporate social responsibilities.



Select and monitor environmentally friendly products and services

We gradually select green factory-certified manufacturers as our purchasing suppliers to purchase products and services that meet national energy conservation and emission reduction requirements. For example, we update purchase specifications in real time to ensure that purchased items always meet the latest energy efficiency and emission standards, and require suppliers themselves to meet environmental protection requirements, etc. For major projects, we submit environmental and energy assessment reports with the goal of building sustainable business and society.

Corporate Governance

Happy Workplace Green Sustainable Circulation Sustainable Topics Management Sustainable Action Initiative

Sustainable Governance

Circulation 1

2020企业社会责任报告 corporation social report

Good Customer Service

Convenient

Complete

Adhering to the attitude of striving for perfection, Asia Cement (China) brings the best quality and perfect all-round service to customers by equipped with high-quality professional service team, observing customer needs, following up customer suggestions in real time and providing professional assistance and technical support.

Considerate

Good

Most convenient transportation route

Each subsidiary has formed a cross-regional sales and transportation network along the Yangtze River transportation line. made overall plans under the group platform and continuously improved delivery capabilities to provide customers with fast, convenient and comprehensive service delivery.

Most complete production and sales network

The Company's sales layout covers vast areas including Sichuan, Hubei, Henan, Hunan, Jiangxi, Anhui, Jiangsu and Zhejiang. The Company has also established manufacturing plants, grinding stations, storage depots and sales outlets in all areas. We provide a fundamental guarantee to provide customers with efficient and convenient sales and after-sales service.

Overview

The most solution plan

Sales team actively visit customers to collection market information and understand customers' demands. As a result, we can provide customized solutions for different clients, creating greater economic benefits for them.

Best product quality

Equipped with a variety of advanced instruments, The Company's laboratory undertakes research and development to constantly improve product quality. It assists customers in conducting laboratory analysis on cement, clinker, mineral powder, concrete and other materials. This helps customers identify and obtain an optimal cost combination, increases the added value of the "Skyscraper" brand cement, and enhances customer goodwill and loyalty.

Customer App

In 2020, the Company upgraded its mobile app several times, optimising several functions for customers (such as ordering and inquiry), to provide customers with fast, convenient and secure services.

Customer

Through the APP, Consignment bill can be issued and the drivers can pick up the goods at the factory with the QR code of his/her mobile phone. Customers can also check, modify and cancel the bill at any time, and check the delivery and account information at any time..

Man-machine Interface

Compatible with all kinds of mobile phones. Simplify operation interface, optimize operation logic and improve ease of use.

Operational improvements

Jiangxi Yadong adopts 'One-Code Pass' to further simplify the delivery process and optimize delivery efficiency. In the future, this method will be extended to all subsidiaries of the Company to bring efficient and convenient services to all customers. In addition, special personnel will be set up to connect with customers and receive feedback for continuous improvement.

Information

All process can be operated online and the data can be synchronized to SAP system, which reduced the repetitive and tedious manual work and improved the efficiency.

Corporate Governance Happy Workplace Sustainable Topics Management Green Sustainable Circulation

Sustainable Action Initiative

Sustainable Governance **Circulation 1**



Customer Satisfaction

Sophisticated product quality, professional services and an accurate grasp of customer needs are the keys to successful business operations. Asia Cement (China) establishes a customer-oriented quality system and business philosophy, using an objective supervision system to comprehensively evaluate customer feedback on products or services. In this way, we intuitively understand customer needs and expectations and use this as the basis for management to achieve sustainable business operations.

After the investigations, the business division will carefully select opinions put forward by the customers and dig deeper to analyse reasons. They will cooperate closely with relevant departments to conduct reviews, develop improvement measures, and promote the overall improvement in customer satisfaction.

The return rate of 2020 customers' satisfaction survey conducted was 100% and the customer satisfaction score was 96 points. However, Asia Cement (China) not be satisfied with this, we will still keep improving products and services and excelling in order to provide better services and quality.



Customer Satisfaction Survey

• The Percentage of Recycling Products and Packaging Materials

There are two types of packaging for cement shipping, the bulk and the bag types. For Asia Cement (China), most of the package is bulk type. In 2020, the percentage of bulk cement package was 89% of the total shipment, the bag type was only 11%.

The material of cement bags of Asia Cement (China) arrives at the national quality inspection standards, which can be recycled and reused to reduce the contamination to the environment. After the cement bags are resold by the dealers to the downstream customers, the paper bags shall be disposed of by themselves on the site, which are generally used to collect the waste on the site, etc., to reduce the impact on the environment.

Protection of Customer Privacy

Asia Cement (China) attaches great importance to the privacy of customers. In 2020 the Company further improved the confidentiality system and implemented it level by level. We strictly requires all colleagues to abide by the company's confidentiality regulations. Everyone should take his share of the responsibility. For confidential documents, we shall be destroyed regularly or immediately depending on the degree of confidentiality. We will keep confidential all business information provided by customers in connection with their business dealings and to avoid the leakage of business information, so as to ensure that customers can have peace of mind in their dealings with us.

In 2020, Asia Cement (China) had neither any cases related to violation of customer privacy, nor had any fines related to violation of product regulations. We will continue to focus on protecting customer privacy in the future.

 Corporate Governance
 Happy Workplace
 Sustainable Topics Management
 Sustainable Action Initiative

 Overview
 Green Sustainable Circulation
 Sustainable Governance Circulation 1
 Appendix

11%

Loose cement

Bagged cement

89%

Happy Workplace--Management Policy

2020企业社会责任报告 corporation social report

Asia Cement (China) has always adhered to the "people-oriented" human resource management concept, regarding employees as our greatest assets. We consistently implement our corporate culture of "Integrity, Diligence, Austerity, Prudence and Innovation". We take improving employee happiness as a key goal, increasing salaries, bonuses and other benefits, and establishing a salary mechanism that integrates personal ability into value creation and shares the fruits of corporate development. For one, we pay attention to employees with a high-quality, safe working environment which cares for them and improves their sense of gain and happiness in a warm, attentive, and focused way.



Overview

Green Sustainable Circulation





Develop a variety of online training courses such as English AI training, real foreign teacher English training, and key talent mentoring.

Advance the factory safety plan. In 2020, the headquarters organised a total of 16,985 hours of online safety training, with an average of 68 hours of training per capita.

Implement physical examinations for onboarding, inservice, and resigning employees in each subsidiary.

Happy Workplace—Description of highlights

Capacity Competitiveness

- In order to make our salaries better than local and industry standards, Asia Cement (China) regularly adjusted the salary system in 2020 to increase the salary of all employees by 22%, a total increase of more than 38 million RMB.
- During the epidemic prevention and control period, employees could apply for public leave (paid leave) and epidemic leave during work days. Salaries were paid as usual during the leave period, and those left behind in the early stage of the epidemic could receive double salary. Taiwanese nationals who were unable to return to Taiwan due to the epidemic could also apply for unused air ticket subsidies and retain family leave.

Occupational health and safety

- Asia Cement (China) has drawn up occupational safety and health policies and management mechanisms for employees to shape a safe and healthy organisational culture. In 2020, the average overtime working hours per capita was reduced by 13.5 hours per month, with employee working hours reasonably arranged to avoid fatigue.
- In 2020, Jiangxi Yadong signed a contract with the Fifth People's Hospital of Jiujiang to provide all employees with customised and personalised mental health services. This scheme will also be implemented in other business areas in 2021.

Special Report on Accidents

Sustainable Action Initiative

Appendix

Sustainable Governance

Circulation 1

• Asia Cement (China) review and improve occupational safety and health management in a timely manner, and analysis the causes of occupational accidents in order to find the improvement solutions.

Happy Workplace

2.1 Employee Structure

Due to the special nature of the cement industry, production sites require operations under high temperature, high pressure, high-altitude, etc., with relatively high work intensity. Due to this, most of the employees are male and production personnel.

Ratio of each employee type



Note: The competent employee is the staff of the Company with employee tenth (including tenth) position or above.



Gender trends for long-term borrowed workers in the past four years



Number of employees

Asia Cement (China) guarantees equal employment in accordance with the law. We strictly abide by laws and regulations, prohibit child labour, adopt the principle of fairness and reject gender discrimination, implementing equal pay for men and women for equal work, and establishing long-term, harmonious and stable labour relations with employees. Asia Cement (China) has 3,804 full-time employees, among whom 295 are on secondment.

Company	Total staff			Official employee			Borrowed employee		
company	Male	Female	Subtotal	Male	Female	Subtotal	Male	Female	Subtota
Jiangxi Yadong	918	146	1064	909	100	1,009	9	46	55
Huanggang Yadong	267	41	308	264	24	288	3	17	20
Nanchang Yadong	42	13	55	42	7	49	0	6	6
Nanchang Yali	78	31	109	78	25	103	0	6	6
Jiangxi Yali	116	14	130	116	6	122	0	8	8
Yangzhou Yadong	143	40	183	138	25	163	5	15	20
Taizhou Yadong	27	7	34	27	5	32	0	2	2
Hubei Yadong	371	98	469	365	66	431	6	32	38
Wuhan Yaxin	228	57	285	227	40	267	1	17	18
Wuhan Yadong	75	11	86	73	4	77	2	7	9
Wuhan Yali	42	8	50	42	8	50	0	0	0
Hubei Yali	81	13	94	79	4	83	2	9	11
Sichuan Yadong	528	122	650	507	56	563	21	66	87
Sichuan Lanfeng	320	78	398	320	76	396	0	2	2
Sichuan Yali	44	11	55	43	7	50	1	4	5
Chengdu Yali	32	7	39	32	7	39	0	0	0
Sichuan Yali	81	9	90	79	3	82	2	6	8
Total	3,393	706	4,099	3,341	463	3,804	52	243	295

Corporate Governance Overview Happy Workplace

Sustainable Governance

Sustainable Topics Management

Circulation 2

Appendix

Sustainable Action Initiative

▶ New and Resigned Staff

2020企业社会责任报告 corporation social report

Asia Cement (China) has a stable workforce with a long tenure, high loyalty and a low turnover rate.

Male and female Numbers of new and former employees



New Resigned



Overview

<u></u>	Total in	New	staff	F	Resign	ed staff	Turnover	
Company	2019	Male	Female	Employment rate	Male	Female	rate	
Jiangxi Yadong	1,022	6	1	0.7%	16	4	2.0%	
Huanggang Yadong	289	5	0	1.7%	6	0	2.1%	
Nanchang Yadong	49	3	0	6.1%	3	0	6.1%	
Nanchang Yali	103	5	3	7.8%	6	2	7.8%	
Jiangxi Yali	125	0	0	0.0%	3	0	2.4%	
Yangzhou Yadong	168	2	0	1.2%	5	2	4.2%	
Taizhou Yadong	32	1	0	3.1%	1	0	3.1%	
Hubei Yadong	435	8	2	2.3%	14	0	3.2%	
Wuhan Yaxin	280	0	0	0.0%	7	6	4.6%	
Wuhan Yadong	77	0	0	0.0%	0	0	0.0%	
Wuhan Yali	50	1	0	2.0%	1	0	2.0%	
Hubei Yali	90	3	0	3.3%	10	0	11.1%	
Sichuan Yadong	583	4	0	0.7%	20	4	4.1%	
Sichuan Lanfeng	405	0	0	0.0%	6	3	2.2%	
Sichuan Yali	52	2	0	3.8%	4	0	7.7%	
Chengdu Yali	43	1	0	2.3%	5	0	11.6%	
Sichuan Yali	84	8	0	9.5%	10	0	11.9%	
Total	3,887	49	6	1.4%	117	21	3.6%	

2.2 Welfare Competitiveness

Systematisation of remuneration

Asia Cement (China) always insists that employees' efforts are in direct proportion to their returns, work more get more, fairness and justice. We regularly adjusts salaries, with the expectation of attracting outstanding talents through competitive compensation and benefits. In 2020, we comprehensively adjusted salaries for all employees, averaging a 22% increase. This balanced the factor of rising prices and ensured employee living standards. Asia Cement (China) regulates social security management in accordance with the law, actively paying various social security co-ordination expenses, so that employee social insurance coverage rate reaches 100%.

Green Sustainable Circulation Sustainable Governance Circulation 2





Asia Cement (China) is committed to developing a fair and just assessment, reward and punishment and salary system to continuously strengthen the construction of talent echelon, so that each employee can enjoy the company's operating results, share the glory and disgrace with the company, and grow together.

Remuneration System

The basic remuneration of Asia Cement (China) mainly consists of salary, allowance (housing allowance plus regional allowance) and duty allowance. In addition, the Company distributes monthly production and sales bonus, full and annual attendance bonus, year-end bonus, employee reward (i.e., bonus) and other bonus systems. Share development performance with employees.

App

Appraisal System

The annual performance appraisal shall be conducted from the aspects of work performance, attendance, working ability and attitude, learning and development potential, etc., and the salary shall be raised according to the performance appraisal results. Exceptional performers get a special promotion every 2 to 3 years, and salary increases of 10-20%.



Subsidy System

In view of the three shifts and employees on night shifts, we have a night shift subsidy system for employees on the second and night shifts, coupled with such systems as high-temperature allowance for special work positions, license allowance, allowance for external dispatching and regional allowance in accordance with national laws and regulations.

Corporate Governance

Overview

Happy Workplace

Green Sustainable Circulation



In order to comfort the staff hard work, each company under Asia Cement (China) has set up the Staff Welfare Committee (SWC for short) and formulated the "Measures for Operation and Administration of the Staff Welfare Committee", appropriating 1.8% of total amount of the staff's salary as welfare fund for the matters related to the staff's benefits. Every year to deepen and enrich the welfare items year by year, to meet the needs of employees in various aspects.

Asia Cement (China) gives employees a variety of welfare programs. Mainly includes : food subsidies, benefits for three national holidays, year-end banquet, tourism and flexible benefits, traffic subsidies, communication subsidies, work uniform, cash gifts for birthday, wedding, funeral, and birth etc.





Sustainable Action Initiative

Appendix

Sustainable Topics Management

Sustainable Governance

Circulation 2

2020企业社会责任报告 **CSR** corporation social report

Social Club Activities

Asia Cement (China) has always attached importance to the construction of 'spiritual civilization' for employees. In order to enrich employee spare time, we provide various sports and leisure facilities in the factory, including basketball courts, football fields, tennis courts, badminton halls, table tennis rooms, libraries, and gyms. We have established various leisure clubs, based on the interests of employees, and regularly hold sports events, endurance running, team sports, etc. Employees can also take part in various social networking events organised by local communities. While enriching employees' spare time, these activities also benefit their physical fitness.



The basketball club participated in the **Matou Industry City Friendly Match**

The Running club participated in the Ruichang Marathon

Corporate Governance

Overview

80



Company	Club	Time	Number of participants	Fee/RMB
	Basketball club	6	144	2,880
	Badminton club	4	72	1,440
Jiangxi Yadong	Tennis club	5	84	1,800
Jiangki Tauong	Football club	2	60	1,065
	Billiards club	9	114	1,700
	Running club	2	100	1,200
	Basketball club	8	120	7,000
	Badminton club	6	144	6,000
Huanggang Yadong	Football club	9	108	6,500
	Table tennis club	8	128	4,000
	Art club	3	120	3,500
	Badminton club	2	32	400
Nanchang Yali	Running club	1	15	300
	Welfare club	4	70	900
Yangzhou Yadong	Chess and card club	1	32	1,580
	Basketball club	1	21	1,050
Hubei Yadong	Badminton club	3	120	5,881
Huber facolig	Tennis club	4	114	5,700
	Fishing club	2	148	7,400
	Basketball club	1	43	2,150
Sichuan Yadong	Badminton club	1	20	1,000
e.enuan ruuong	Table tennis club	1	33	1,650
	Football club	1	34	1,700
	Total	84	1,876	66,796

Sustainable Action Initiative

Green Sustainable Circulation

Happy Workplace

Sustainable Topics Management Sustainable Governance Circulation 2

Happy Workplace



Mental health

In order to meet the needs of employees' mental health, improve their mental health, and relieve psychological pressure, Asia Cement (China) has reached a cooperation with the Fifth People's Hospital of Jiujiang in 2020 to provide employees with special, customised mental health services. We regularly hold on-site mental health lectures at subsidiaries, popularising psychological knowledge, helping to ease psychological problems and assisting in handling employee crises. We have opened a dedicated mental health hotline, and established professional services such as consultation and visits by telephone as well as WeChat, QQ, etc.



Asia Cement (China) has signed a cooperation agreement with Jiujiang Fifth People's Hospital in 2020.

C Holiday system

Employees were unable to attend work due to the impact of the COVID-19 epidemic in 2020. Employees could apply for public leave (paid leave) and epidemic leave during the workdays. During leave, employees were paid according to the standards agreed in the labour contract. In the early stage of the epidemic, left-behind personnel can receive double salary. The impact of the epidemic has caused employees to be unable to attend work. Employees can apply for public leave (paid leave) and epidemic leave during the working day. During the leave, employees are paid according to the standards agreed in the labor contract. In the early stage of the epidemic, personnel left behind could receive double salary.



Person-time and total hours of all kinds of paid leave

Sustainable Topics Corporate Governance Happy Workplace Managemer Initiative Green Sustainable Sustainable Governance Overview Appendix Circulation2

Number of people staying on maternity and nursing leave

Туре	Maternity leave (Female)	Nursing leave (Male)
Number of applicants in 2020	463	3341
Actual number of applicants in 2020	41	145
Number of the employees returning to work after leave in 2020	38	144
Reinstatement rate	92.7%	99.3%
Number of applicants in 2020	46	208
Number of employees still on the job after their leave in 2019	40	198
Retention rate	87.0%	95.2%

Note: The reinstatement rate is equal to the number of people returning to work after vacation in 2020/the actual number of applicants in 2020.

The retention rate is equal to the number of people still on duty in the 12 months after vacation in 2019/the actual number of applicants in 2019.



Asia Cement (China) respects the rights and interests of every worker, treats them equally regardless of gender differences, and always practices the equal development for employees' career development. Men and women have equal access to opportunities such as occupational training and promotion.

Operation of Labor Union

All companies under Asia Cement (China) set up labor unions according to the regulations, and all employees are members of the labor unions. The total union fees in 2020 were more than RMB7.5762 million, and each union convened meetings and held parties from time to time.

> Comparison of Starting Salary and Minimum Wage in **Operation Locations**

Corporate Governance

Overview

Starting salaries of basic staff in each of business area of Asia Cement (China) were higher than the local minimum wage standard with the highest rate up to 2.1. In addition, the Company has set up a system to control minimum wage, by which the Company would make up the difference if the employees' salaries were lower than the local minimum wage standard due to frequent sick and personal leaves or decline in the performance of the Company, which was also agreed by the employers and employees in the labor contracts, and were carried out consistently in the payroll settlement system.

Happy Workplace

Green Sustainable Circulation



Comparison of Starting Salary and Minimum Wage in Operation Locations

Company	Starting salaries of basic staff	Local minimum wage standard	Ratio
Jiangxi Yadong	2, 621	1,470	1. 78
Huanggang Yadong	2, 621	1,250	2.1
Nanchang Yadong	2, 621	1,680	1.56
Nanchang Yali	2, 621	1,680	1.56
Jiangxi Yali	2, 621	1,470	1. 78
Yangzhou Yadong	2,866	2, 020	1. 42
Taizhou Yadong	2,866	2, 020	1. 42
Hubei Yadong	2, 621	1,500	1. 75
Wuhan Yaxin	2, 621	1,500	1. 75
Wuhan Yadong	2, 621	1,750	1.5
Wuhan Yali	2, 621	1,500	1. 75
Hubei Yali	2, 621	1,750	1.5
Sichuan Yadong	2, 621	1,650	1. 59
Sichuan Lanfeng	2, 621	1,650	1. 59
Sichuan Yali	2, 621	1,780	1. 47
Chengdu Yali	2, 621	1,650	1. 59
Sichuan Yali	2, 621	1, 650	1. 59

Sustainable Topics Management

Sustainable Governance **Circulation 2**

Sustainable Action Initiative Appendix

Transparent disclosure of salary structure

2020企业社会责任报告 corporation social report

Asia Cement (China) provides a basic salary mainly composed of base salary, allowance (housing allowance + regional allowance) and job bonus. In addition, according to operating and employee work performance, we regularly distribute production and sales bonuses, year-end bonuses, employee incentives (i.e., bonuses), and attendance bonuses. In order to maintain and improve employee loyalty, Asia Cement (China) carries out comprehensive salary adjustments from time to time, so that our salaries are better than local and industry standards.

Company	Ratio of annual income of the highest paid individual to the average annual income of other employees	Ratio of percentage of increase in annual income of the highest paid individual to percentage of increase in the average annual income of other employees		
Jiangxi Yadong	4.55	-0.17		
Huanggang Yadong	2.73	0.08		
Nanchang Yadong	2.69	-0.61		
Nanchang Yali	2.52	-0.61		
Jiangxi Yali	2.50	-0.09		
Yangzhou Yadong	3.68	0.77		
Taizhou Yadong	2.61	0.88		
Hubei Yadong	4.42	0.00		
Wuhan Yaxin	1.99	-0.33		
Wuhan Yadong	2.45	0.41		
Wuhan Yali	1.88	0.38		
Hubei Yali	1.95	-0.08		
Sichuan Yadong	4.03	-0.23		
Sichuan Lanfeng	3.98	0.14		
Sichuan Yali	2.98	-0.69		
Chengdu Yali	1.65	0.25		
Sichuan Yali	2.39	0.01		

Complaint Cases of Employee

Asia Cement (China) has established a number of unimpeded employees' communication channels to ensure that employees' needs and suggestions are met. If employees are unreasonably treated in the workplace, or if they discover that the Company has irregularities or infractions, Prosecution and complaint may be filed through the Company's website or the audit office. Asia Cement (China) will carefully and actively handle and investigate according to the relevant operating regulations and handling principles. If the verification is indeed a violation, it will be discussed according to the circumstances to regulate the practitioners to act according to regulations, maintain company discipline, and safeguard employees' rights and interests, promoting the Company image.

2.3 Capacity Competitiveness

Systematic Training

In order to meet the needs of corporate operation and allow employees to grow together with the Company, continuous training has been provided for employees of different ranks and functions. The development and improvement of our training system is designed to provide a support platform for talent cultivation.



In order to establish a sound management system and in response to the market competition and challenge, the Company designed systematic promotion channel to management position for the employees, and developed a management echelon from basic to medium and senior with the implementation of all kinds of training and rotating.



Training

In addition to the management promotion channel, the company also strengthens the training of professional and technical personnel. The Company provided promotion channel for technical positions for these employees to build the technical, project-oriented and advisor-oriented teams with technicians, engineers, administrators and specialists and provided corresponding training and rotating for their transition to management cadres.

In order to accelerate nurturing talents and meeting the needs of our operations, the Company promotes the establishment of a sound training system, and carefully creates strategic, practical courses to enhance overall quality and capabilities of employees. In order to cultivate international talents and carry out international business, in 2020 we invited foreign teachers to provide tailor-made English AI training sessions. The Company invested more than 364,000 RMB into training in 2020.

 Corporate Governance
 Happy Workplace
 Sustainable Topics Management
 Sustainable Action Initiative

 Overview
 Green Sustainable Circulation
 Sustainable Governance Circulation 2
 Appendix
 †只

Onboarding training for each subsidiary

For new recruits, each subsidiary will implement various training in the fields of professional skills, environmental protection and three-level occupational health and safety, as well as on-the-job apprenticeship (setting examples). The number of participants in 2020 was 3,776, with the total number of training hours reaching 30,502.

Key talent training

Cultivate a new generation of talents for Asia Cement (China), count and draw up key talent plans, focus on organisational strengths and personal development needs, and maximize effectiveness to lay a solid strategic foundation for the future development of the Company. The number of key personnel training has reached 62, with total training costs of about 156,000 RMB.

English AI training

In order to create "international" and "future-oriented" talents, the Company provides intelligent, customised English training. The total time of English AI training was 11.25 days, with training costs being about 63,000 RMB.

English training by real foreign teachers

According to the needs of the Company, foreign teachers can offer oneto-one, tailor-made courses. Cultivate compound talents who understand business and possess excellent communication skills. In 2020, total perperson training time was 11.25 days, with training costs more than 145,000 RMB.

Happy Workplace

Green Sustainable Circulation

Project	Echelon Completed	Number of employees	Total length of time of each person (day)	Expenditure (RMB0'000)
Key personnel	62	11	11	15.6
English AI training	80	1	11.25	6.3
English training by real foreign teachers	31	1	11.25	14.5
	36.4			

Major project-oriented trainings in 2020 are as follows:

Management of Employee's Occupational Skills and Lifelong Learning

In addition to systematical training, Asia Cement (China) also established independent libraries providing various relevant books about professional skills to encourage employees' self-study, improve their professional knowledge and skills and form a good habit of lifelong learning. We should broaden our horizons, master cutting-edge information, In daily work, it helps to innovate and adapt to the new norms, new requirements and new normal of the new era.



Corporate Governance

Overview

Sustainable Topics Management

Sustainable Action Initiative

Sustainable Governance

Circulation 2



A Sound Performance Management Cycle

To evaluate employees' performance and contribution objectively, encourage and find out their potential and strengthen their sense of competition and responsibility, Asia Cement (China) will assess the performance of each employee regularly every year, determine personal goals at the end of the year, track assessment regularly at the middle of the year, and conduct assessment summary and evaluation at the end of the year, to reflect the principle of rewarding the good and publishing the bad so that the overall efficiency of the Company can be improved. Moreover, each department also formulated Management Measures for Routine Assessment, pursuant to which the employees' daily behaviors would be assessed and accumulatively recorded and excellent employees would be rewarded by giving award or recording the merits which would be announced to the public. In 2020, the company reward 210 employees and merit 18 employee.

Number of rewards and punishments in 2020



2.4 Occupation Safety and Health

Staff is the most valuable fortune of a company. Asia Cement (China) has always upheld that only with healthy staff and safe working environment can produce reliable and safe products for customers. Therefore, Asia Cement (China) developed policies and goals for safety and hygiene management according to Safety Production Standardization Marking Scheme for Cement Enterprises (《水泥企业安全生产标准化评分标准》) to improve and manage staff's healthy status, and we also introduced improved management system including conducting comprehensive risk assessment in workplaces and setting up various management systems and standards for safety practices in compliance with the decrees relating to occupational safety and hygiene such as Production Safety Law of the PRC ($\langle\!\langle \Psi \rangle\!$ 华人民共和国安全生产法》), which took safety as its basic requirement and by improving the working environment and mechanical devices (facilities) actively to ensure a safe and secure circumstance being created.

Management Policy and Objectives on Hygiene and Safety

In terms of management policy on safety and hygiene, the Company has adopted the founding spirit of the Far Eastern Group of "Sincerity, Diligence, Thrift, Prudence and Innovation" to sincerely fulfill its corporate social responsibility and to abide by regulations to establish and improve management organizations and systems. It made risk assessment carefully to each operation, set up standard operating procedures and adopted appropriate safe construction approach. All employees are required to be involved in the system and to receive the training in order to attain the habit of safety as the first priority. Through the way of walking management, the Company is able to predict and to take appropriate measures in order to prevent the disaster from happening. It endlessly drives innovative R&D and improves safety measures to Create a "Everyone is responsible for security and security is for all" working environment in order to protect the safety and health of the laborers. A part of Asia Cement (China) organizational culture is to create a safe and healthy work place, thus, each employee feels safe working here.

Happy Workplace Sustainable Topics Management Sustainable Action Initiative Sustainable Governance Green Sustainable Circulation **Circulation 2**

Corporate Governance

Overview

Occupational Health, Safety and Health Management Policy of Asia Cement (China



Organization of Occupational Safety and Hygiene

Asia Cement (China) have assigned unit and the staff to be responsible for occupational safety and hygiene management by law. Depending on the nature and number of employees of the business unit, an appropriate management system is introduced and implemented; each unit has established a work safety committee by law, the general manager acted as the chairperson, the members included the department head, professionals and staff representatives. The committee holds a meeting at least once each month to propose reviews to policies on safety and health, operational behavior, safety hazard, to form a perfect opinion. And according to the resolution to arrange the rectification work. Shanghai Yali is no disclosure as it has not set up a special work safety committee.

Happy Workplace

Green Sustainable Circulation

Composition table of "Safety Production Committee" :

Company	Chairperson	Number of manager and professionals	Number of staff representatives	Staff representatives ratio
Jiangxi Yadong	General Manager	71	19	21%
Huanggang Yadong	General Manager	20	13	39%
Nanchang Yadong	General Manager	7	2	22%
Nanchang Yali	General Manager	14	2	13%
Jiangxi Yali	Vice General Manager	12	7	37%
Yangzhou Yadong	General Manager	24	10	29%
Taizhou Yadong	Vice General Manager	8	8	50%
Hubei Yadong	General Manager	97	17	15%
Wuhan Yaxin	General Manager	15	0	0
Wuhan Yadong	Manager	18	5	22%
Wuhan Yali	Vice General Manager	6	7	54%
Hubei Yali	Vice General Manager	5	12	71%
Sichuan Yadong	General Manager	29	8	22%
Sichuan Lanfeng	General Manager	20	6	23%
Sichuan Yali	General Manager	5	5	50%
Chengdu Yali	General Manager	10	3	23%
Sichuan Yali	General Manager	5	3	38%

Corporate Governance

Overview

86

Sustainable Topics Management

Sustainable Action Initiative

Sustainable Governance **Circulation 2**

Asia Cement (China) have established a sound occupational safety and hygiene management system. And passed the certification of GBT 4500(2020) occupational health and safety management system of Beijing Guojian Lianxin Certification Center once each year. Or obtained a certificate of standard enterprise for work safety standardization issued by work safety supervision and management department every 3 years.

Occupational Safety and Hygiene Management System

Company	Occupational safety and hygiene management system	Ministry of Labor night safety and health management
,		system performance
		recognition
Jiangxi Yadong	Work safety standardization secondary enterprise(building materials), Standardisation of Level 2 enterprise production safety (open pit mine), Occupational health & safety management systemGB/T45001-2020/ ISO45001:2018(Certificated by GJC), Work safety standardization secondary enterprise(Transportation)	无
Huanggang Yadong	Work safety standardization secondary enterprise(building materials), Occupational health & safety management systemGB/T45001-2020/ISO 45001:2018(Certificated by GJC)	无
Nanchang Yadong	Work safety standardization secondary enterprise(building materials)	无
Nanchang Yali	Work safety standardization secondary enterprise(building materials), Work safety standardization secondary transport enterprises (Port ordinary cargo transport), Occupational health & safety management systemGB/T45001-2020/ISO45001: 2018(Certificated by GJC)	无
Jiangxi Yali	Work safety standardization secondary enterprise(Transportation)	无
Yangzhou Yadong	Work safety standardization level 3 enterprises (building materials)	无
Taizhou Yadong	Work safety standardization level 3 enterprises (Other building materials)	无
Hubei Yadong	Work safety standardization secondary enterprise(building materials), Occupational health & safety management systemGB/T45001-2020/ISO 45001:2018(Certificated by GJC)	无
Wuhan Yaxin	Work safety standardization secondary enterprise(building materials), Occupational health & safety management systemGB/T45001-2020/ISO 45001:2018(Certificated by GJC) (Notes:Work safety standardization is under review)	无
Wuhan Yadong	Work safety standardization secondary enterprise(building materials), Occupational health & safety management systemGB/T45001-2020/ISO 45001:2018(Certificated by GJC)	无
Wuhan Yali	Standardisation of Level 3 enterprise production safety (manufacturing of other cement-like products), Occupational health & safety management systemGB/T45001- 2020 ISO 45001:2018(Certificated by GJC), Environmental management system GB/T24001-2016 ISO 14001:2015(Certificated by GJC)	无
Hubei Yali	None	无
Sichuan Yadong	Work safety standardization secondary enterprise(building materials), Occupational health & safety management systemGB/T45001-2020/ISO 45001:2018(Certificated by GJC)	无
Sichuan Lanfeng	Work safety standardization secondary enterprise(building materials), Work safety standardization secondary enterpriseOccupational health & safety management systemGB/T45001-2020/ISO 45001:2018(Certificated by GJC)	无
Sichuan Yali	Work safety standardization level 3 enterprises (building materials), Certification for the occupational health and safety management system, quality management system and environmental management system	无
Chengdu Yali	Work safety standardization level 3 enterprises (Industry and Trade), Occupational health & safety management systemGB/T45001-2020/ISO45001: 2018(Certificated by GJC)	无
Sichuan Yali	Production safety standardisation certificate (level 3)	无

Collective Agreement Incorporated in the Norm of Safety and Hygiene

Jiangxi Yadong Cement Co., LTD. Ruichang factory entered into Construction Safety and Hygiene Regulations of Contractors with contractors, there are 75 safety and hygiene regulations, and the training for contractors will be conducted annually. It is a safety and hygiene norm for the group to obey.



Management Performance of Safety and Hygiene

Management of Plans and Appraisal of Performance.

Asia Cement (China) manages its operational procedure under the direction of annual safety production guidelines, objectives and indicators and establishes safety production goals and appraisal standards of performance. The environmental protection and working safety department of the Company conducts regular inspection on each unit and evaluation monthly (including proactive and passive performance) and reports the effective implementation of each unit to the Production Safety Committee.

Training of Occupational Safety and Hygiene Management

Corporate Governance

Overview

Asia Cement (China) has a highly-skilled occupational safety and hygiene management team. Every year, high-quality talents are introduced from colleges and universities, and a sound personnel training and incentive system has been established. Regular or irregular implementation of on-the-job education and training, selecting excellent supervisors and colleagues as the teachers, effectively improved the awareness of safety prevention and production skills. In view of the low quality of the contractor's staff, it has formulated a safety "threelevel education and training" tailored to it, organizing a review meeting on corporate security accidents (events), which was chaired by the general manager and special assistant general manager, and attended by supervisors and safety management personnel of each unit. It publicized the concept of "safety first" and required all employees to strictly implement various safety management systems and accountability system.



Happy Workplace

Green Sustainable Circulation

The statistics of 2020 occupational safety and hygiene management performance appraisal of Asia Cement (China):

Company	Safety level	Material occupational disasters	Ordinary occupational disasters	Total working hours	FR	SR	FSI
Jiangxi Yadong	safe	0	1	266,3760	0.38	3.75	0.04
Huanggang Yadong	safe	0	1	760,320	1.32	9.21	0.11
Nanchang Yadong	safe	0	1	126,720	7.89	1,357.32	3.27
Nanchang Yali	safe	0	0	271,920	0.00	0.00	0.00
Jiangxi Yali	safe	0	1	322,080	3.10	6.21	0.14
Yangzhou Yadong	safe	0	1	430,320	2.32	11.62	0.16
Taizhou Yadong	safe	0	0	84,480	0.00	0.00	0.00
Hubei Yadong	safe	0	1	1,137,840	0.88	55.37	0.22
Wuhan Yaxin	safe	0	1	699,600	1.43	18.58	0.16
Wuhan Yadong	safe	0	0	203,280	0.00	0.00	0.00
Wuhan Yali	safe	0	0	132,000	0.00	0.00	0.00
Hubei Yali	safe	0	2	219,120	9.13	821.47	2.74
Sichuan Yadong	safe	0	2	1,486,320	1.35	40.70	0.23
Sichuan Lanfeng	safe	0	3	1,045,440	2.87	70.78	0.45
Sichuan Yali	safe	0	0	132,000	0.00	0.00	0.00
Chengdu Yali	safe	0	1	102,960	9.71	1,175.21	3.38
Sichuan Yali	safe	0	0	216,480	0.00	0.00	0.00
Total	safe	0	15	10,034,640	1.49	70.51	0.32

Note: The relevant formulas of assessing occupational disaster are as following: FR (Frequency Rate)=times of disability injury × 1000000/total working hours

SR (Severity Rate)=lasting days of disability injury × 1000000/total working hours

FSI (Frequency-Severity Indicator)=V((FR×SR/1000))

AR(Absenteeism rate)=(Total sick leave + Total industrial injury leave + Total personal leave)/ Total working hours ×100%

Sustainable Topics Management Sustainable Action Initiative Sustainable Governance

Circulation 2

2020企业社会责任报告 corporation social report

Demonstration of Occupational Safety and Hygiene Management

On May 26, 2020, the Ruichang Manufacturing First Plant of Jiangxi Yadong Cement Co., Ltd. organised the first manufacturing team of the plant, the secretariat and the environmental protection labour and safety office to jointly carry out the "Ammonia Leakage" comprehensive emergency rescue exercise to share rescue experience.





Regarding to contractors: we treat workers from the contractors as our own staff. Besides of on-site inspecting and offering necessary guidance, we also provide relevant education and training to improve their safety and hygiene performance so as to reduce working accidents and health hazards.

Monitor and Improve the Environment of Highrisk Workplaces and Significant Healthharming Workplace

Each plant of Asia Cement (China) had set up relevant safety and hygiene operation standards based on the risk assessment conducted in respect of the health-harming environment caused by noise, dust, drinking water and others, and monitors the environment internally and regularly engages external party to carry out environment monitoring and personnel health examination as required. There was no occupational disease as determined according to the regulations and the occupational disease rate (ODR) was 0% in 2020. In addition, we not only improve the environment safety but also provide essential harness in high-risk operational sites such as overhead, electric shock, scaffolding and flying objects. Educational training and danger prediction training were carried out to arouse employees' safety awareness so as to reduce unsafe behavior. We conduct examination inside the plant and daily on-site inspection and supervision to prevent the occurrence of harm effectively.

> Corporate Governance Overview

Happy Workplace Green Sustainable Circulation

Circulation 2

Happy Workplace

Asia Cement (China) health check number of employees in significant health-harming workplace in 2020:

Company	Dust	Noise	High temperature
Jiangxi Yadong	788	93	64
Huanggang Yadong	219	192	15
Nanchang Yadong	29	29	0
Nanchang Yali	26	14	0
Jiangxi Yali	70	70	0
Yangzhou Yadong	111	62	0
Taizhou Yadong	30	30	0
Hubei Yadong	301	30	10
Wuhan Yaxin	229	33	26
Wuhan Yadong	75	42	0
Wuhan Yali	49	49	0
Hubei Yali	83	83	0
Sichuan Yadong	309	289	27
Sichuan Lanfeng	268	248	0
Sichuan Yali	14	14	0
Chengdu Yali	11	11	0
Sichuan Yali	63	63	0



health protection and



safety inspection mobilisation



Employees' Health Promotion and Management

Health Check and Management for Labor

In order to protect the health of employees and prevent and eliminate the occupational hazards and protect the health rights of workers. The Company provides free health examinations for all employees before, during and after work. A medical treatment or rehabilitation program will be proposed by the Company depending on employees' examination reports and clinical situations, and the Company will arrange an appropriate work adjustment according to the actual situation.





Employee Health Promotion Activities

In order to ensure the healthy diet of employees, each subsidiary has set up its own canteens and restaurants, focusing on nutrition, safety and hygiene management.

Prohibition of child labour and forced labour

The Company strictly implements the requirements of the Provisions on the Prohibition of Using Child Labor and abides by commercial operating standards. When recruiting workers, the Company strictly and carefully checks the ID of the recruited personnel. Only after identity is verified can they be registered in the factory. All employees hired are voluntarily employed, and no forced or fraudulent labour is allowed.

Corporate Governance

Overview

Happy Workplace Green Sustainable Circulation Sustainable Topics Management Sustainable Governance Circulation 2

Sustainable Action Initiative

Statistics of Occupational Disasters

2020企业社会责任报告

corporation social report

CSR

Based on the important occupational disaster disabling statistics index announced by labor department and GRI G4, in the analysis of occupational hazard statistics, Asia Cement (China) selected Disabling Frequency Rate (FR), Disabling Severity Rate (SR), Frequency-Severity Indicator (FSI) and Attendance Rate (AR) as the basis (the data does not include traffic accidents outside of the plant).

In 2020, Asia Cement (China) had 15 incidents of injury and disability among colleagues. The Disabling Frequency Rate (FR) was 1.49 (1.70 and 0.00 for men and women); the Disabling Severity Rate (SR) was 70.51 (80.29 and 0.00 for men and women) and the Frequency-Severity Indicator (FSI) 0.32 (0.37 and 0.00 for men and women respectively), without any occupational diseases and deaths due to work. Contractors did not record any disability cases. The FR was 0.00 (male and female: 0.00 and 0.00), the SR was 0.00 (male and female: 0.00 and 0.00 for men and women); there were no cases of occupational disease.

Asia Cement (China) Occupational Disaster and Attendance Statistics in 2020:

Company		FR			SR			FSI	
Company	Male	Female	Total	Male	Female	Total	Male	Female	Total
Jiangxi Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huanggang Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nanchang Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nanchang Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jiangxi Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yangzhou Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Taizhou Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hubei Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wuhan Yaxin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wuhan Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wuhan Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hubei Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sichuan Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sichuan Lanfeng	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sichuan Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chengdu Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sichuan Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal		0.00			0.00			0.00	

Asia Cement (China) Occupational Disaster and Attendance Statistics of "Laborers of Contractors" in 2020:

		FR			SR			FSI		A	R
Company	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Jiangxi Yadong	0.42	0.00	0.38	4.17	0.00	3.75	0.04	0.00	0.04	0.003%	0.00%
Huanggang Yadong	1.43	0.00	1.32	10.04	0.00	9.21	0.12	0.00	0.11	0.008%	0.00%
Nanchang Yadong	9.24	0.00	7.89	1,589.06	0.00	1357.32	3.83	0.00	3.27	1.271%	0.00%
Nanchang Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000%	0.00%
Jiangxi Yali	3.29	0.00	3.10	6.59	0.00	6.21	0.15	0.00	0.14	0.005%	0.00%
Yangzhou Yadong	2.74	0.00	2.32	13.72	0.00	11.62	0.19	0.00	0.16	0.011	0.00%
Taizhou Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000%	0.00%
Hubei Yadong	9.59	0.00	9.13	863.06	0.00	821.47	2.88	0.00	2.74	0.690%	0.00%
Wuhan Yaxin	1.68	0.00	1.43	21.89	0.00	18.58	0.19	0.00	0.16	0.175%	0.00%
Wuhan Yadong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000%	0.00%
Wuhan Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000%	0.00%
Hubei Yali	9.59	0.00	9.13	863.06	0.00	821.47	2.88	0.00	2.74	0.690%	0.00%
Sichuan Yadong	1.49	0.00	1.35	45.20	0.00	40.70	0.26	0.00	0.23	0.036%	0.00%
Sichuan Lanfeng	3.55	0.00	2.87	87.59	0.00	70.78	0.56	0.00	0.45	0.701%	0.00%
Sichuan Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000%	0.00%
Chengdu Yali	11.48	0.00	9.71	1,388.89	0.00	1,175.21	3.99	0.00	3.38	1.111%	0.00%
Sichuan Yali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000%	0.00%
Total	1.70	0.00	1.49	80.29	0.00	70.51	0.37	0.00	0.32	-	-
Subtotal		1.49			70.51			0.32		-	-

Note: The relevant formulas of assessing occupational disaster are as following:

FR (Frequency Rate)=times of disability injury × 1000000/total working hours

SR (Severity Rate)=lasting days of disability injury × 1000000/total working hours

FSI (Frequency-Severity Indicator))=V((FR×SR/1000))

Happy Workplace

AR (Absence Rate)=(total sick leave hours+total injury leave hours+total personal leave hours)/total working hours \times 100%

Sustainable Topics Management

Circulation 2

Corporate Governance Overview

Green Sustainable Circulation

Sustainable Governance

Appendix

Sustainable Action Initiative

Compliance with Laws and Regulations

Penalties Concerning Environmental Protection

Asia Cement (China) continues to improve its equipment in production process and strengthen relevant prevention and control so as to incessantly reduce the damage to environment during production or activities. Below sets out a list of penalties on each company in relation to environmental protection in 2020:

Company	Times of being fined for violation of environmental laws	Amount fined for violation of environmental laws (RMB' 0,000)	Description of fines and other non-monetary penalties for violation of environmental laws
Jiangxi Yadong	0	0	-
Huanggang Yadong	0	0	-
Hubei Yadong	0	0	-
Hubei Yali	0	0	-
Wuhan Yadong	0	0	-
Wuhan Yali	0	0	-
Wuhan Yaxin	0	0	-
Yangzhou Yadong	0	0	-
Taizhou Yadong	0	0	-
Sichuan Yadong	0	0	-
Sichuan Yali	0	0	-
Sichuan Yali	0	0	-
Sichuan Lanfeng	0	0	-
Chengdu Yali	0	0	-
Jiangxi Yali	0	0	-
Nanchang Yali	0	0	-
Nanchang Yadong	0	0	-

Happy Workplace

Green Sustainable Circulation



Corporate Governance

Overview

Sustainable Topics Management

Sustainable Action Initiative

Sustainable Governance Circulation 2

The major sustainability topic management of Asia Cement (China) is a continuous improvement cycle. To ensure the implementation of the sustainable development, Asia Cement (China)'s sustainable topic management is achieved through 4 steps, include: Sustainable Topics Identification, Stakeholders Assessment and Engagement, Sustainable Topic Impact Assessment and Material Topic Management and Disclosure. And assess sustainability impact through a questionnaire survey for the purpose of sustainable topics management and the sustainable operations of Asia Cement (China).



3.1 Sustainable Topics Identification

Asia Cement (China)'s procedure for the identification of material topics was based on the framework of GRI sustainability report and under the guidance of its reporting principles and defined content. The sustainability topics identify covered internal and external topics, which are sources for collecting and organizing the relevant topics.



Sustainable Impact Assessment and Questionnaire Survey on the Concerned Topics

To ensure the related topics sustainable impact analysis is correct, the CSR Committee of Asia Cement (China) designed a questionnaire to analyze the sustainable impact of 30 related topics by the degree of concern of stakeholders. A total of 434 valid questionnaires were recovered. We add the weight of stakeholders to calculate their behavior and concerns.

Overview

Opinions1:

Strengthen the management of dykes and rivers, vigorously advocate the reuse of water resources, and strengthen environmental protection, which are more conducive to long-term, healthy and orderly development of Asia Cement (China). Opinions2:

Provide more adaptable employment platforms for local employees.



Appendix

Circulation 3

3.2 Evaluation and Negotiation of Stakeholders

Stakeholder Identification and Assessment

We identified five categories of stakeholders, namely, employees, investors/shareholders, customers, communities and suppliers with reference to the five major aspects of AA 1000 Stakeholder Engagement Standard-2015 for stakeholder negotiation (namely, dependency, responsibility, tension, influence and diverse perspectives) as well as stakeholder discussion and assessment by the CSR Committee.

Stakeholders Engagement and Response

Saved for the various interactions with the stakeholders through the normal business, Asia Cement (China) also carried out Stakeholders Engagement through all kinds of virtual and real integration ways including actual face-to-face communication platform and online monitoring network, to achieve the best communication benefits.

"Mailbox for corporate sustainability (achc@achc.com.cn)" was set up corresponding to the commencement of the sustainability management of the organization, and will be managed by the relevant competent department of the • Company to address all topics concerned by stakeholders.



Sustainable Topics Management

CSR 2020企业社会责任报告 corporation social report

96

Corporate Governance

Overview

Happy Workplace

Green Sustainable Circulation

Stakeholders	Issues concerned	Frequency and platform of communication	Implementation in 2019	Responding chapter
Staffs	Employment relationship Occupational health and safety Talent attraction and retention Training and education Benefits and interest of staff Forced labor	Trade union meetings and fellowship activities New recruits interview and online announcements from time to time Updating staff codes of practice from time to time Staff interviews and performance interviews conducted by supervisor each year Planning and occasional educational training for staff Electronic bulletin board All kinds of meetings	The trade unions held meetings and fellowship activities irregularly, and paid more than 7.5762 million yuan in membership fees in 2020. Annual training for all types of staff lasts 10 hours on average Provide staff with complete benefits and bonuses Implement the 8-hour working system	Sustainable Governance Circulation
Investors / shareholders	Economic performance Company's operating strategies Risks and opportunities Resources Water Emissions Compliance with environmental laws	Holding of Annual General Meeting Investor zone on the Company's website Public information observatory Communication and feedback by phone or e-mail Regular declaration of energy efficiency	Achieve dividend payout ratio of 30% More than 80% of the water is recycled Carbon reduction of 2,095.3 tons/year Meet energy efficiency indicators	Sustainable Governance Circulation Green Sustainable Circulation 2
Customers / partners	Customer Service Product liability Product quality and technology research and development Mine vegetation and greening Recycling economy	Annual customer satisfaction survey Quality certification Website feedback and inspection report download Visiting customer on a regular/ irregular basis Communication and feedback by phone or e-mail	100% customer satisfaction ISO product certificate A total of 60.9 hectares of land has been restored Comprehensive utilization of resources promotes recycling economy	Sustainable Governance Circulation Green Sustainable Circulation 1 Green Sustainable Circulation 3
Community/local groups/the general public	Community participation Social public welfare Environmental protection laws and regulations Sustainable environment education Air pollution prevention	Participation in residents' activities in neighborhood from time to time Public welfare activities Visiting local groups Company's website Communication by phone or e-mail	In 2020, there were 9 meetings and communications among local residents, totaling 75 participants. Continuous social participation Continuous care for community Transform mine agriculture park About 49.277 million yuan has been spent on pollution prevention in 2020.	Green Sustainable Circulation 4 Green Sustainable Circulation 5 Green Sustainable Circulation 2
Suppliers	Company's operating strategies Supply chain management Procurement behavior Cement 4.0	Company's website Supplier Evaluation Supplier on-site audits or visits Supplier management platform (Ecome) Questionnaire on suppliers' opinion	Supplier's social responsibility commitment	Sustainable Governance Circulation Green Sustainable Circulation 2
Government authorities	Compliance with regulations Transparent and timely information disclosure Recycling economy	Explanation sessions, seminars or forums of regulations Public information observatory and the Company's website Official document	Publish the significant information in accordance with the provisions in time. Comprehensive utilization of resources promotes recycling economy	Green Sustainable Circulation 3
Non-profit organizations	Environmental protection investment Commitment to greenness Climate change Mine vegetation and greening	Company's website Participating in NGO activities Seminars/forums	Green mines invested 52.8605 million RMB in 2020.	Green Sustainable Circulation 1
Industrial circles /academic institutions	Industry-academy cooperation Technology research and development Cement 4.0	Industry-academy cooperation projects Seminar Regular exchanges Scholarships and grants	Construction and education cooperation - Yuan Ze University, Yadong institute of technology Mine internship -Environment and Resource of Southwest University of Science and Technology, Southwest University of Science and Technology Mining Engineering University, Wuhan University of Technology majoring in inorganic nonmetallic materials	Green Sustainable Circulation 4

Sustainable Action Initiative

Appendix

Sustainable Topics Management

Sustainable Governance Circulation3 Identification of the Impact

For the 30 relevant issues above, the CSR committee of Asia Cement (China) accessed the influence level of each consideration of Asia Cement (China) on the impact of economy, environment and society based on the opinion of the operation management personnel within the organization, and identified the impact on the material aspects of sustainable development of Asia Cement (China) after summarizing all the points.

3.3 Management and Disclosure of **Significant Topics**

Identification of Material Topics

A matrix of material issues was identified based on the level of concern of the stakeholders and the impact on various sustainable issues. The CSR Committee discussed the degree of concern of stakeholders above 3.8 and the analysis of sustainable impact above 3.6 were defined as the material issues of Asia Cement (China), We have 20 material issues in total under the matrix.

Confirmation and Review of the Completeness of the Material Aspects

CSR committee would submit the identified material topics of Asia Cement (China) to the chairman for review and confirmation after summarizing the relevant information to ensure all topics and considerations were covered.



4.50



ESG Material Topics of Asia Cement (China):

E Environmental topics	S Social topics	G Governance topics
 Raw Material Energy Water Emission Environmental Compliance Low-carbon Green Process(Cement 4.0) Waste 	 Sustainable Environmental Education Employment Relationship Employee/Employer Relationship Talent attraction and retention Diversity & Equality of Opportunity Occupational Health & Safety Training & Education Local Communities 	 Economy Performance Sustainable Mines Recycling Economy Market Image Corporate Governance

Corporate Governance Happy Workplace Sustainable Topics Management Sustainable Action Initiative Sustainable Governance Overview Green Sustainable Circulation Appendix **Circulation 3**

2020企业社会责任报告 **CSR** corporation social report

3.4 Sustainable Topic Validation and Report Management

The Significance of Major Topics for Asia Cement (China)

In terms of the material themes identified by us, the management policy and implementation status of each material theme will be disclosed in reports. Apart from active responses on the communication platform, Asia Cement (China) set up a complete link function to facilitate reading and information retrieval.

ESG Types	Significant topics	GRI standards	Impact boundary	Chapter	Note: ALL for "ALL operating sites".	Note: ALL for "AL operating sites".
	Raw Material	GRI 301	ALL	Green Sustainable Circulation 3.2	25	47-48
	Energy	GRI 302	ALL	Green Sustainable Circulation 2.3 Green Sustainable Circulation 3.2	25	32-33,47-48
E	Water	GRI 303	ALL	Green Sustainable Circulation2.4	25	34-38
Environmental Topics	Emission	GRI 305	ALL	Green Sustainable Circulation 2.3	25	28-32
	Environmental Compliance	GRI 307	ALL	Green Sustainable Circulation 2.4	25	92
	Low-carbon Green Process	Custom	ALL	Green Sustainable Circulation 2	25	26-27
	Sustainable Environmental Education	Custom	ALL	Green Sustainable Circulation 5	53	53-54
	Employment Relationship	GRI 401	ALL	Sustainable Governance Circulation2.1	56	77-84
S	Employee/Employer Relationship	GRI 402	ALL	Sustainable Governance Circulation 2	56	56
Social Topics	Occupational Health & Safety	GRI 403	ALL	Sustainable Governance Circulation 2.4	56	85-92
	Training & Education	GRI 404	ALL	Sustainable Governance Circulation 2.3	56	88-89
	Local Communities	GRI 413	ALL	Green Sustainable Circulation 1.5 Green Sustainable Circulation 4	11, 48	23-24
	Economy Performance	GRI 201	ALL	Sustainable Governance Circulation 1.2	56	63-65
	Indirect Economic Impact	GRI 203	ALL	Green Sustainable Circulation 1.5 Green Sustainable Circulation 4	11, 48	23-34,50-52
G Governance Topics	Sustainable Mines	Custom	Jiangxi Yadong Huanggang Yadong Wuhan Yaxin Sichuan Yadong Sichuan Lanfeng	Green Sustainable Circulation 1	11	12-24
	Recycling Economy	Custom	ALL	Green Sustainable Circulation 3	44	45-46

Note: ALL for "ALL operating sites".

Corporate Governance

8

Happy Workplace

Management Sustainable Governance **Circulation 4**

Sustainable Topics

Sustainable Action Initiative Appendix

4.1 Disclosure of Projects and Indicators on Sustainable Mine

Implement the policy of "stripping and mining at the same time, stripping first, and mining both lean and rich mines", to achieve an ore recovery rate of above 95%.

Adopting top-to-bottom stage mining. The platform is designed as an introverted storage one, which guides the surface runoff to gather on the inside of the section to the mine drainage system, optimizes the parameters of the cement plant, increases the utilization of high-magnesium waste rocks, and reduces the amount of waste. In 2020, the ore recovery rate was over 95%.

Local residents employed by factories and mines accounted for at least 60% of workers employed.

In 2020, local residents employed by factories and mines accounted for 80.4% of workers employed.

List of green mines at or above the provincial level before 2022。

In 2020, there were two limestone mining areas assessed and included on the national green mine list, Jiangxi Yadong Xinwutian Limestone Mine and Xiazhang Limestone Mine.

Comply with the Green Mine Construction Specification of Cement Limestone Industry (水泥灰岩绿色矿山建设 规范) (DZ/T 0318-2018). The green coverage of mining areas should reach 100%

A comprehensive greening was carried out in the afforestation area in 2020, with a total greening area of 60.9 hectares in the whole mining area.



Comply with the GB6722-2014 Safety Regulations for Blasting, to protect the target safety and allow particle vibration speed to be below the specification limit of 1.5cm/sec.

In 2020, all the mines of the Company have adopted Orica high-precision nonelectronic detonators for deep-hole blasting on a hole-by-hole basis, while Sichuan Yadong adopted digital electronic detonators with higher safety standards to lower blasting vibration more effectively.

Comply with Grade I standard in the Integrated Wastewater Discharge Standard (《污水综合排 放标准》) (GB8978-1996)

In 2020, the quarterly sampling and testing of each mine is lower than the limit in Grade I standard.

Slope stability monitoring according to the Technical Code for Non-coal Open-pit Mine Slope Engineering (《非煤露天矿边坡工程技术 规范》) (GB51016-2014)

In 2020, we installed slope displacement observation piles on observation platform every month and the median error of the displacement of the monitoring point is less than 1mm.

Noise levels comply with Grade II limit of the Emission Standard for Industrial Enterprises Noise at Boundary (《工业企业厂界 环境噪声排放标准》) (GB 12348); waste levels comply with the Emission Standard of Air Pollutants for Cement Industry (《水泥工业大气污染物排放标准》) (GB 4915)

The observed noise and particulate matter emissions in 2020 were lower than the standard limit.

The implementation in 2020: In 2020, adhered to the Green Mine Construction Specification of Cement Limestone Industry (水泥灰岩绿色矿山建设规范) (DZ/T 0318-2018), mines of Asia Cement (China) implemented the development concept of innovation, coordination, green, openness and sharing, realizing the overall development of the whole process of mine resources development, such as resource utilization, energy conservation and emission reduction, environmental protection, land reclamation and building a harmonious relationship between the enterprise and the local community. We set 8 indicators for self-evaluation and fully achieved its goal in 2020.

Set goals in 2021: On the basis of the setting goals in 2020, We continue to maintain and optimize, and with the development of communication technology, promote the mine production automation system, realize the centralized control and information linkage of production, monitoring and other subsystems, and complete the pilot mine test input.

Happy Workplace

Green Sustainable Circulation

Corporate Governance

Overview

Sustainable Topics Management

Sustainable Governance

Circulation 4

Appendix

Sustainable Action Initiative



4.2 ISO 26000 Social Responsibility Guidelines

ISO 26000 Related Topics of Asian Cement (China)	Chapter and related description of the report
Recognizing and understanding of corporate social responsibility	CSR Operator Words
Identification and participation of stakeholders	CSR-Sustainable 3.1 Sustainable Topics Management
Governance of the organization	CSR-Sustainable 1 Corporate Governance
Human rights	CSR-Sustainable 2 Happy Workplace
Labor practices	
Environment	CSR-Green 2 Low-carbon Green Intelligent Manufacturing
Fair operation practice	CSR-Sustainable 1 Corporate Governance
Participation and development of the community	CSR-Green 4 Social Care
Relevant action plan	CSR'S management strategy of each chapter
Social responsibility communication	Communicate through annual CSR and private networks
Review and improve corporate social responsibility	Review, analyze and improve CSR topics regularly, and authorize the CSR committee to implement relevant action plans.

100

Corporate Governance Happy Workplace

Overview

Green Sustainable Circulation

Sustainable Topics Management
Sustainable Governance
Circulation 4

Sustainable Action Initiative
Appendix

۲

4.3 Environmental, Social and Governance Reporting Guidelines(ESG)

Category	Aspects	Key performance indicators	ESG indicators	Page/Notes
	A1: Emissions	A1.1	Types of emissions and relevant data	28-32
		A1.2	Total volume of greenhouse gas emissions (calculated by ton) and (if applicable) its density (if calculated by capacity per unit, each infrastructure)	28-32
		A1.3	Total volume of hazardous wastes (calculated by ton) generated and (if applicable) its density (if calculated by capacity per unit, each infrastructure)	45-46
		A1.4	Total volume of harmless wastes (calculated by ton) generated and (if applicable) its density (if calculated by capacity per unit, each infrastructure)	45-46
Ļ		A1.5	Stating measures and achievements of reducing the volume of emission	31
nen		A1.6	Stating the methods of dressing hazardous and harmless wastes, measures of reducing the volume and achievements obtained	45-46
Environment	A2: Resources usage	A2.1	Total consumption (calculated by 1000 KW-h) of direct and / or indirect energy (e.g. electricity, gas or oil) and its density (if calculated by capacity per unit, each infrastructure) by category	32-33
Ъ		A2.2	Total volume of water consumption and its density (if calculated by capacity per unit, each infrastructure)	34
		A2.3	Stating the efficiency plan of energy usage and achievements obtained	32
		A2.4	Stating if any problems exists when seeking for available water source, and the plan of improving water using efficiency and achievements obtained	35
		A2.5	Total amount of packaging materials used by finished goods (calculated by ton) and (if applicable) amount attributable to per production unit	75
	A3: Environment and natural resources	A3.1	Stating the significant impacts on environment and natural resources of business activities and actions taken to manage such impacts	17-21, 31
	B1: Employment	B1.1	Total number of employees categorized by gender, employment type, age groups and regions	77-78
		B1.2	Turnover rate of employees categorized by gender, age groups and regions	78
	B2: Health and safety	B2.1	Mortality rate of work due to work injuries	88
		B2.2	Number of lost work days as to work injuries	91
		B2.3	Stating the measures taken for occupational health and safety and relevant implementation and monitoring methods	87-88
	B3: Development and training	B3.1	Percentage of trained employees categorized by gender and employee type (e.g. senior management, medium management and so on)	77-78
	training	B3.2	Average hours of each employee to finish the trainings categorized by gender and employee type	84
	B4: Labor standards	B4.1	Stating the measures of reviewing recruiting practices to avoid child labor and compulsory labor	90
		B4.2	Stating measures adopted for identifying the non-compliance conditions when such non-compliance occurs	83
Ē	B5 : Supply Chain Management	B5.1	Number of suppliers by region	72
Social	Wanagement	B5.2	Stating the management related to engaging suppliers, number of suppliers conducting relevant management as well as implementation and monitoring plan of such management	72-73
	B6: Product responsibility	B6.1	Percentage of products in the total sold or delivered which need to be called back for health and safety problems	No recovery
		B6.2	Investments obtained for products and services and the corresponding response programs	66
		B6.3	Stating the management only related to the maintaining and protection of intellectual property rights	
		B6.4	Stating the processes of quality examination and procedure of calling back products	
		B6.5	Stating the consumers' information protection and privacy policy as well as the implementation and monitoring approach	75
	B7: Anti-corruption	B7.1	The number of corruption proceedings cases claimed against issuers or its employees and adjudicated and the proceedings results during reporting period	61
		B7.2	Stating the precautionary measures and reporting procedures and relevant implementation and monitoring approach	61
	B8: Community investment	B8.1	Focusing on the fields invested (e.g. education, pleasurable environment, labor needs, health, culture, sports)	21-24,49-51,54-55
		B8.2	Utilizing resources (e.g. money or time) in the focused fields	21,49-52

Corporate Governance Overview Happy Workplace Green Sustainable Circulation

Sustainable Governance

Sustainable Topics Management

Circulation 4





Appendix PART FOUR





Appendix1: GRI Guidelines Content Index: General Standard Disclosure

		GRI 102: 2016	Page/Notes
	102-1	Name of the organization	57
	102-2	Activities, brands, products, and services	57,63
	102-3	Location of headquarters	57
	102-4	Location of operations	57
	102-5	Ownership and legal form	57
	102-6	Markets served	57
Organizational profile	102-7	Scale of the organization	57,77-78
	102-8	Information on employees and other workers	77-78
	102-9	Supply chain	71-72
	102-10	Significant changes to the organization and its supply chain	No change
	102-11	Precautionary principle or approach	66
	102-12	External initiatives	101-102
	102-13	Membership of associations	62
	102-14	Statement from senior decision-maker	4
Strategy	102-15	Key impacts, risks, and opportunities	67-68
Ethics and	102-16	Values, principles, standards, and norms of behavior	61
integrity	102-17	Mechanisms for advice and concerns about ethics	61
	102-18	Governance structure	56
	102-19	Delegating authority	56
	102-20	Executive-level responsibility for economic, environmental, and social topics	94-96
	102-21	Consulting stakeholders on economic, environmental, and social topics	94-96
Governance	102-22	Composition of the highest governance body and its committees	57, More details in Annual Report
	102-23	Chair of the highest governance body	57
	102-24	Nominating and selecting the highest governance body	57
	102-25	Conflicts of interest	59
	102-26	Role of highest governance body in setting purpose, values, and strategy	57
	102-27	Collective knowledge of highest governance body	57, More details in Annual Report

		GRI 102: 2016	Page/Notes
	102-28	Evaluating the highest governance body's performance	57, More details in Annual Report
	102-29	Identifying and managing economic, environmental, and social impacts	94-96
	102-30	Effectiveness of risk management processes	68
	102-31	Review of economic, environmental, and social topics	94-96
	102-32	Highest governance body's role in sustainability reporting	56
	102-33	Communicating critical concerns	56
	102-34	Nature and total number of critical concerns	97
	102-35	Remuneration policies	79
	102-36	Process for determining remuneration	59
	102-37	Stakeholders' involvement in remuneration	59
	102-38	Annual total compensation ratio	83
	102-39	Percentage increase in annual total compensation ratio	83
	102-40	List of stakeholder groups	96
	102-41	Collective bargaining agreements	82
Stakeholder engagement	102-42	Identifying and selecting stakeholders	95
00	102-43	Approach to stakeholder engagement	95
	102-44	Key topics and concerns raised	95-96
	102-45	Entities included in the consolidated financial statements	57
	102-46	Defining report content and topic Boundaries	97
	102-47	List of material topics	98
	102-48	Restatements of information	None
	102-49	Changes in reporting	None
Reporting	102-50	Reporting period	3
practice	102-51	Date of most recent report	3
	102-52	Reporting cycle	3
	102-53	Contact point for questions regarding the report	3
	102-54	Claims of reporting in accordance with the GRI Standards	3
	102-55	GRI content index	103-105
	102-56	External assurance	None

2020企业社会责任报告 corporation social report

CSR

General Standard Disclosure

Overview

103

Green Sustainable Circulation

Specified Standard Disclosure

Sustainable Governance Circulation



|--|

		Economic Topics GRI 200:2016	
Material Topics		MA and Indicators	Page/Notes
		МА	56
	201-1	Direct economic value generated and distributed	63-65
Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	67-68
GRI 201	201-3	Defined benefit plan obligations and other retirement plans	81-84
	201-4	Financial assistance received from government	Without subsidies
		МА	76
Market Presence GRI 202	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	83
	202-2	Proportion of senior management hired from the local community	23-24
		МА	11,48,53
Indirect Economic Impacts GRI 203	203-1	Infrastructure investments and services supported	11-21,49-52
	203-2	Significant indirect economic impacts	26-28,49-52

Markey and Markey							
Environment Topics GRI 300:2016							
Material Topics		MA and Indicators	Page/Notes				
	МА		44				
Materials	301-1	Materials used by weight or volume	46				
GRI 301	301-2	Recycled input materials used	47,75				
	301-3	Reclaimed products and their packaging materials	75				
		25					
Energy GRI 302	302-1	Energy consumption within the organization	46				
	302-2	Energy consumption outside of the organization	26-27				
	302-3	Energy intensity	29-30				
	302-4	Reduction of energy consumption	31				
	302-5	Reduction in energy requirements of products and services	32				
		44					
Water	303-1	Water withdrawal by source	34				
GRI 303	303-2	Water sources significantly affected by withdrawal of water	None				
	303-3	Water recycled and reused	35-36				
		44					
	305-1	Direct (Scope 1) GHG emissions	29-30				
Emissions GRI 305	305-2	Energy indirect (Scope 2) GHG emissions	29-30				
	305-3	Other indirect (Scope 3) GHG emissions	None				
	305-4	GHG emissions intensity	29-30				
	305-5	Reduction of GHG emissions	27				
	305-6	Emissions of ozone-depleting substances(ODS)	None				
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx) , and other significant air emissions	38-41				
Environmental Compliance GRI 307		44					
	307-1	Non-compliance with environmental laws and regulations	92				

Overview

Green Sustainable Circulation

General Standard Disclosure Specified Standard Disclosure

Sustainable Governance Circulation

Appendix

104

and the second s

Appendix2: GRI Guidelines Content Index: Specified Standard Disclosure

		Social Topics GRI 400:2016	
Material Topics		MA and Indicators	Page/Notes
	МА		76
Employment GRI 401	401-1	New employee hires and employee turnover	77
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	79
	401-3	Parental leave	82
Labor/Manageme nt Relations GRI 402		MA	76
	402-1	Minimum notice periods regarding operational changes	依法规
Occupational Health and Safety GRI 403		МА	76
	403-1	Workers representation in formal joint management-worker health and safety committees	86
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	88
	403-3	Workers with high incidence or high risk of diseases related to their occupation	89
	403-4	Health and safety topics covered in formal agreements with trade unions	86
Training and Education GRI 404		МА	76
	404-1	Average hours of training per year per employee	84
	404-2	Programs for upgrading employee skills and transition assistance programs	83-84
	404-3	Percentage of employees receiving regular performance and career development reviews	84
Local Communities GRI 413		МА	11,48
	413-1	Operations with local community engagement, impact assessments, and development programs	14-15,21,24
	413-2	Operations with significant and potential negative impacts on local communities	17-21



105

General Standard Disclosure Specified Standard Disclosure

Green Sustainable Circulation

Overview

Sustainable Governance Circulation