

# 2019

## SUSTAINABILITY REPORT

A Shared Journey with Lithium



# About this Report



This report is the sustainability report (or social responsibility report) for the fourth consecutive year issued by Ganfeng Lithium Co., Ltd., which aims to communicate with stakeholders on corporate social responsibility, operational initiatives and performance, and to respond to stakeholders' needs.

## ○ Reporting Period

The reporting period is from 1<sup>st</sup> January to 31<sup>st</sup> December, 2019. Some of the statements and data are beyond the reporting period in an appropriate manner.

## ○ Reporting Scope

The report covers the headquarters, branches and subsidiaries of Ganfeng Lithium Co., Ltd. Unless otherwise specified, the environmental data disclosed in this report was generated by Ganfeng's operations in mainland China.

## ○ Data Source

The data and information in the report was extracted from Ganfeng Lithium Co., Ltd.'s relevant documents, reports and statistical results.

## ○ Reporting Reference

The report was prepared in accordance with *Appendix 27 Environmental, Social and Governance Reporting Guide of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (HKEX ESG Reporting Guide)*.

## ○ Response to the Four Principles of the *HKEX ESG Reporting Guide*

**Materiality:** To prepare this report, company conducted a materiality analysis to determine the completeness and accuracy of its contents. The process and results of materiality analysis are presented in Section Sustainable Development Management of this report.

**Quantitative:** The report disclosed quantitative data on both environmental and social aspects to demonstrate the performance of indicators.

**Balance:** Company strives to achieve objective and unbiased information disclosure. The contents of the report came from company's internal management documents, statistics and public disclosure, as well as public media reports, with no improper revisions.

**Consistency:** Unless otherwise stated, the data disclosed in this report was from the unified information collection process and working mechanism established by company to ensure the comparability of data year after year.

## ○ Reporting Specification

For convenience, Ganfeng Lithium Co., Ltd. is referred to as “Ganfeng Lithium”, “company” or “we” in the report.

## ○ Access to this report

You can download the Chinese version of this report on the website of the Shenzhen Stock Exchange, or the Chinese and English versions on the website of the Hong Kong Stock Exchange.



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# Message from the Chairman

Dear readers:

The year 2019 recorded torrents of alteration and development in the lithium industry: The Nobel Prize in Chemistry graced the field of lithium batteries; the price of lithium salt continued to fall; policies adjusted for new energy vehicles; and global automotive electrification was accelerated. Amidst the opportunities and challenges, Ganfeng Lithium forged ahead adhering to the concept of "creating unlimited value by utilising limited resources". We continuously made headway with management upgrading, global layout, technological innovation and sustainable development; leaving a string of solid footprints in every track.

In 2019, Ganfeng Lithium registered a slew of operational achievements. The newly established Overseas Business department explored a new opportunity in overseas investment and further expanded the layout of resources such as brine, spodumene and lithium clay. Lithium hydroxide continued to see increase in market share and recognition amongst international markets. The Basic Lithium Plant operated at full steam to produce high-quality lithium salt products in an efficient and constantly refined manner. With the relocation and expansion of organic lithium production lines, we saw steady sales performance in spite of intensified market competition. Our production capacity of consumer batteries surged, power battery and energy storage battery plants expanded and transformed, batteries for True Wireless Stereo caused a sensation in the market and solid-state lithium batteries advanced steadily. The technology of battery recycling and ternary precursors continued to improve, leading to the company's initial formation of strategic layout and market advantages in battery recycling.

The year 2019 featured the "management year" of Ganfeng Lithium. We reviewed the organisational structure and carried out the reorganisation to enhance efficiency in resource allocation, rejuvenate the management and clarify responsibilities corresponding to post, so that the company firmly moved towards specialisation. We promoted the construction of the automotive industry quality system IATF16949 and systematically improved the company's management capabilities. The management reform aligned the management system better with our development strategy so that the company adapts itself to a multitude of new challenges brought by its rapid development. This helped to improve the company's sustainable profitability and lay a solid foundation for its long-term development.

We actively advocated the consciousness of the community on shared future for mankind and established a vision for sustainable development. In deference of nature and the environment, we promoted resource conservation and recycling with advanced management approaches, science and technology, continued to reduce environmental impact and respond to climate change. Adhering to the people-oriented approach and respect for human rights, we implemented safety guarantees and raised employees' sense of belonging by propagandising the "Ganfeng" culture internally and general public's sense of wellbeing by poverty alleviation and education support externally. This helped us shoulder greater social responsibility with our increasing heft of abilities.

Looking forward to 2020, Ganfeng Lithium will usher in its 20<sup>th</sup> anniversary. Today we enjoy a considerable scale and we will still go all out in the future. We will harness advanced information technology to improve production automation and management capability. We will vigorously cultivate talents, especially business talents who can stand on their own, to lead the transformative development of the company. We will carry out innovation and reform, seek high-quality development driven by technological innovation and dare to break the stereotypes in management and institution. We will keep vigilant of all risks while endeavouring to be among the first-class enterprises in the global lithium industry.

As a line of a poem goes, "Someday, with my sail piercing the clouds, we will ride the wind, break the waves, and traverse the vast, rolling sea." By feeling accurately the pulse of the times and living our vision to the full, we will transform market challenges into opportunities for corporate development and work with all stakeholders to create a sustainable and beautiful future.

Chairman of Ganfeng Lithium

Li Liangbin

“

One will do a number of endeavours throughout life to benefit both oneself and others. The mission of Ganfeng Lithium is to utilise limited lithium resources to create a green, clean and healthy life for human development and progress.

”





# About Us

Ganfeng Lithium is a global leader in the lithium industry. The company was listed on the Shenzhen Stock Exchange in August 2010 (A-share code: 002460), becoming the first listed company in China's lithium industry. In October 2018, we were successfully listed on the main board of the Hong Kong Stock Exchange (H-share code: 01772). The company is currently the sole A+H share-listed company in the domestic lithium industry. We started as a manufacturer of midstream lithium compounds and lithium metals and have successfully expanded to the upstream and downstream of the industrial value chain.

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Business sectors



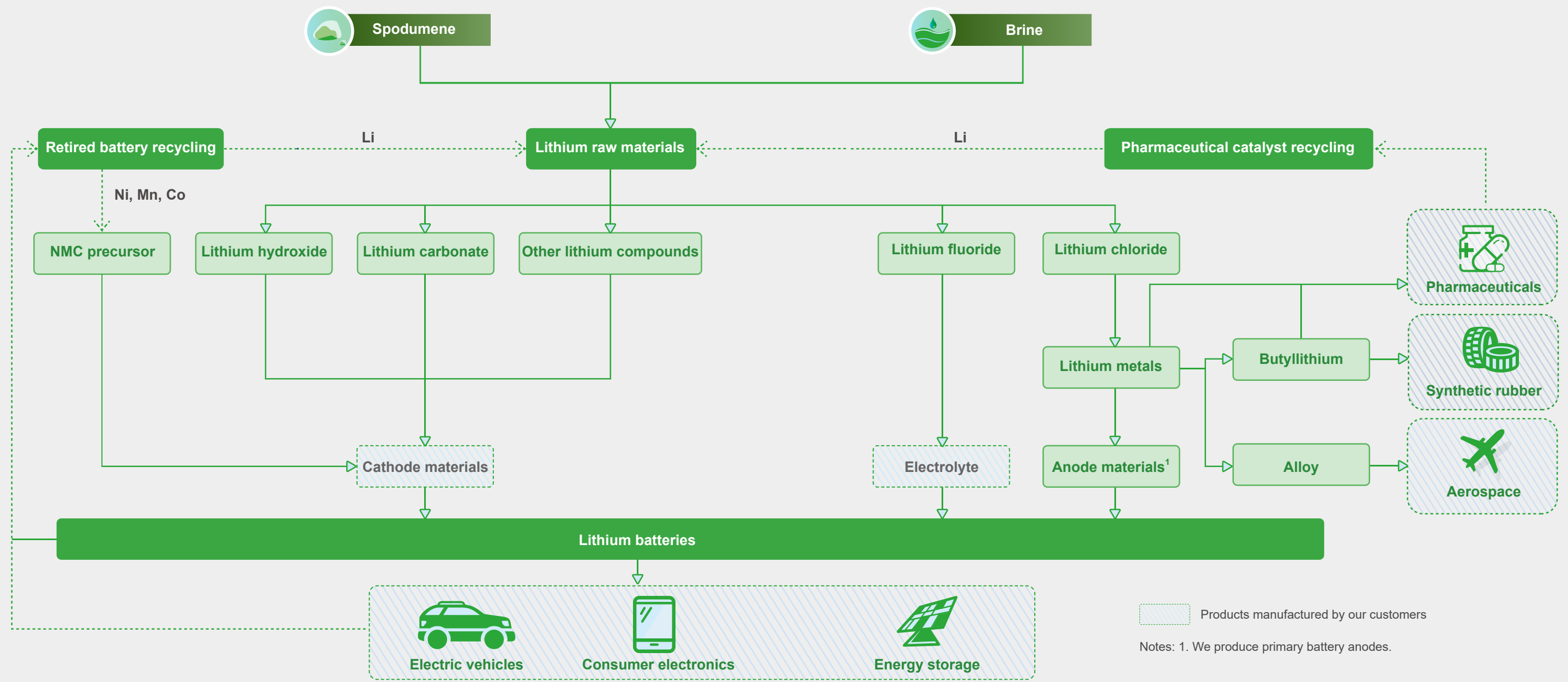
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Products

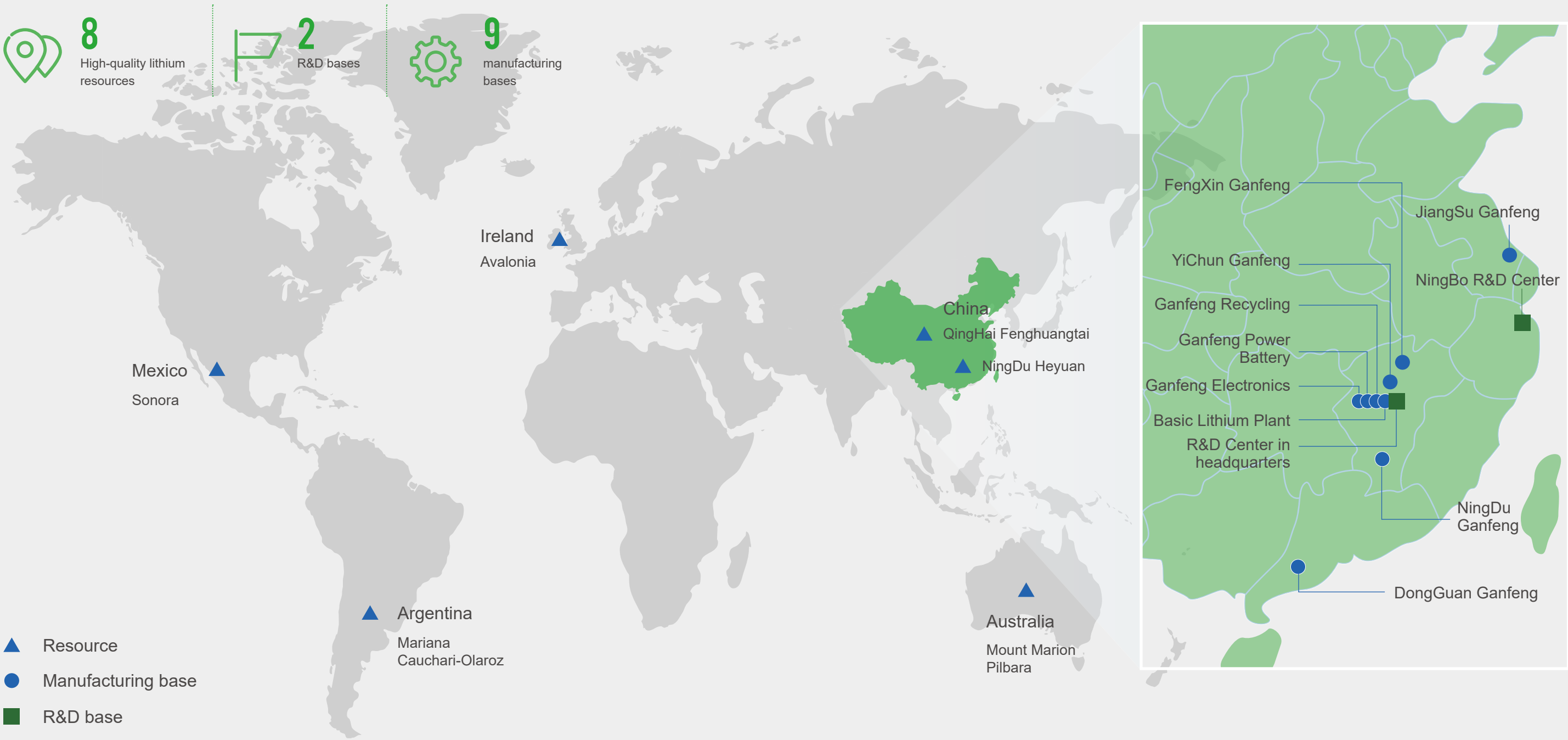


The company's business runs through the industrial value chain including upstream lithium resource development, midstream lithium salt deep processing, lithium metal smelting, downstream lithium battery manufacturing and comprehensive recycling of retired lithium batteries. We are the only company in the world that possesses industrial technologies for lithium extraction from brine, lithium extraction from ore and lithium extraction from recycling. The company has more than 40 types of lithium compounds and lithium metal products in five categories which are widely used in electric vehicles, energy storage, 3C products, chemicals and pharmaceuticals among other areas. Our comprehensive product portfolio can meet customers' personalised and diversified needs.

## Ganfeng Lithium's Li-Ecosystem



Global Layout



The company launched plants in Argentina and Mexico which will help shorten the supply chain, improve the efficiency of lithium resource transportation, reduce carbon dioxide emissions during transportation and provide employment opportunities for local residents. We will also build basic living facilities and sustainable communities to enhance residents' wellbeing.



# Corporate Culture

## Vision

To build a worldwide first-class enterprise with upstream and downstream integration in the lithium industry

## Mission

To utilise limited lithium resources to create a green, clean and healthy path for human development and progress

## Spirit

To constantly strive to become stronger and pursue excellence

## Core Value

Integrity and transparency, responsibility fulfilment, specialisation and efficiency, innovation-driven development and a win-win cooperation

## Operational Philosophy

To create unlimited value by utilising limited resources

## Enterprise Tenet

To contribute wealth to society, create value for customers, build a platform for employees and seek profit for shareholders

## Sustainable Development Policy

Taking the people-oriented approach and placing emphasis on continuous improvement, ensuring safety and observing laws and business ethics and pursuing green development to bolster the circular economy



# Honours and Awards in 2019

## China Top 100 Enterprises Award

In December 2019, we were awarded the "China Top 100 Enterprises Award" by the China Business Top 100 Forum.



## The Best Board of Directors in Investor Relations for Small and Medium-Sized Listed Companies in China

On 26<sup>th</sup> April 2019, we won the "Tianma Award" for the Best Board of Directors in Investor Relations for Small and Medium-Sized Listed Companies in China at the tenth Selection of China's Listed Companies for Investor Relations event.



## Best Growth Potential Award for Hong Kong Listed Companies

## Best Information Disclosure Award for A-share Listed Companies



On 31<sup>st</sup> May 2019, we won the "Best Growth Potential Award for Hong Kong Listed Companies" and the "Best Information Disclosure Award for A-share Listed Companies" in the "Gelonghui: First Selection of Best Listed Companies in Greater China".

## 2019 Green Paradigm Award

In January 2020, we won the 2019 Green Paradigm Award at the 9<sup>th</sup> China Charity Festival.



## 2019 Responsible Brand Award

In January 2020, we won the Responsible Brand of the Year 2019 at the 9<sup>th</sup> China Charity Festival.



## Outstanding Brand Award for China Lithium Industry

In January 2020, we won the 2019 Brand Empowering China: Outstanding Brand Award for China Lithium Industry in the 2019 Brand Empowering China Economic Forum cum Innovation Achievement Release.



## China's Most Socially Responsible Enterprise

In January 2020, we won the title of China's Most Socially Responsible Enterprise in the 2019 Brand Empowering China Economic Forum cum Innovation Achievement Release.



## New Energy Listed Company with Best Growth Potential

We won the title of New Energy Listed Company with Best Growth Potential in the 2019 List of Reputable Public Companies in China.



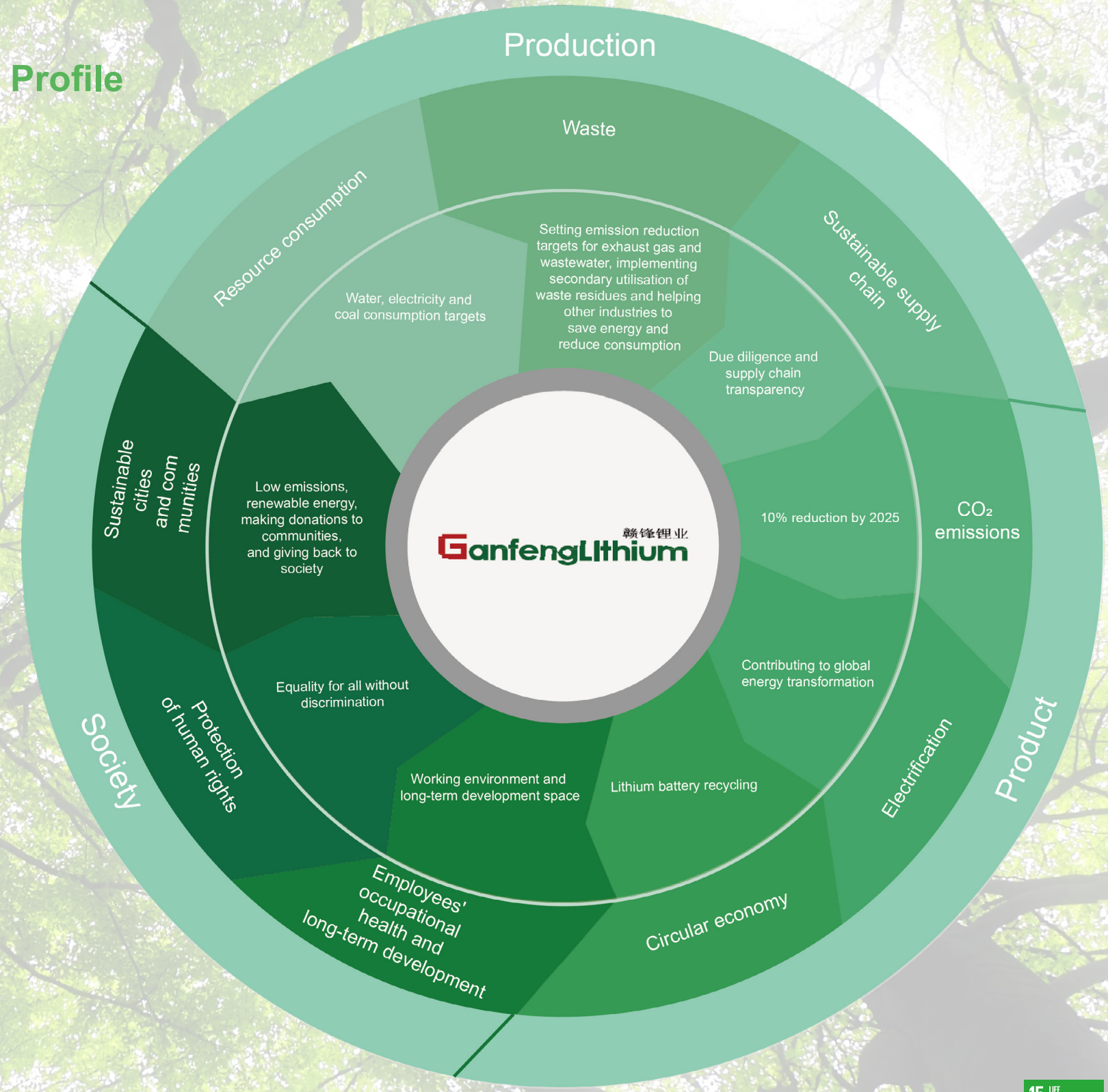
## Listed in Xinhua Credit Platform

In June 2019, we were listed in Xinhua Credit Platform.





# Sustainable Development Profile





# Sustainable Development Management

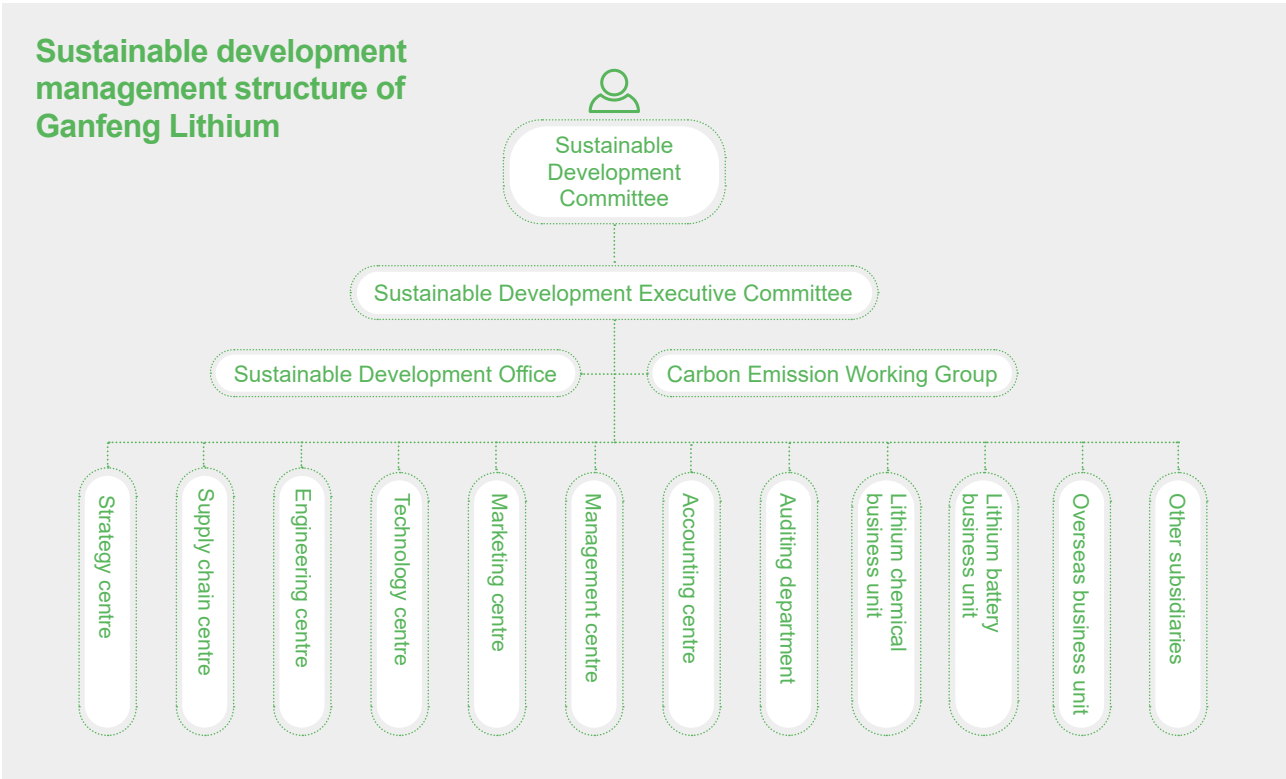
## Sustainable Development Management

In order to improve its environmental, social and governance (ESG) management, the company further improved the ESG management structure and established a board-level Sustainable Development Committee with three directors as members, mainly responsible for formulating the company's sustainable development goals and development plans, supervising the operation of the sustainable development system of the company's business segments and providing suggestions and solutions to improve the company's sustainable development performance. The board of directors of the company reviewed and approved the *Working Rules of the Board's Sustainable Development Committee* to enhance the sustainable development management on all fronts.

The company established a sustainable development executive committee, mainly responsible for organising and implementing specific tasks of sustainable development and affiliated by a Sustainable Development Office and a Carbon Emission Working Group.

**Sustainable Development Office:** Led by the Strategic Investment department, the office has the heads of various departments participate and cooperate to formulate the annual sustainable development work plan, facilitate the work and coordination of various departments and subsidiaries and regularly report the work progress to the Sustainable Development Committee.

**Carbon Emissions Working Group:** It is mainly responsible for the company's carbon emissions verification and management, formulating carbon management related systems and development plans, establishing a carbon information management system and promoting the company's progress with carbon emissions trading.



## Stakeholder Engagement

We attach great importance to communication with stakeholders. We regularly collect opinions and suggestions from internal stakeholders including employees and senior management through various channels, as well as feedback and expectations from external stakeholders such as the government, customers, suppliers and media.

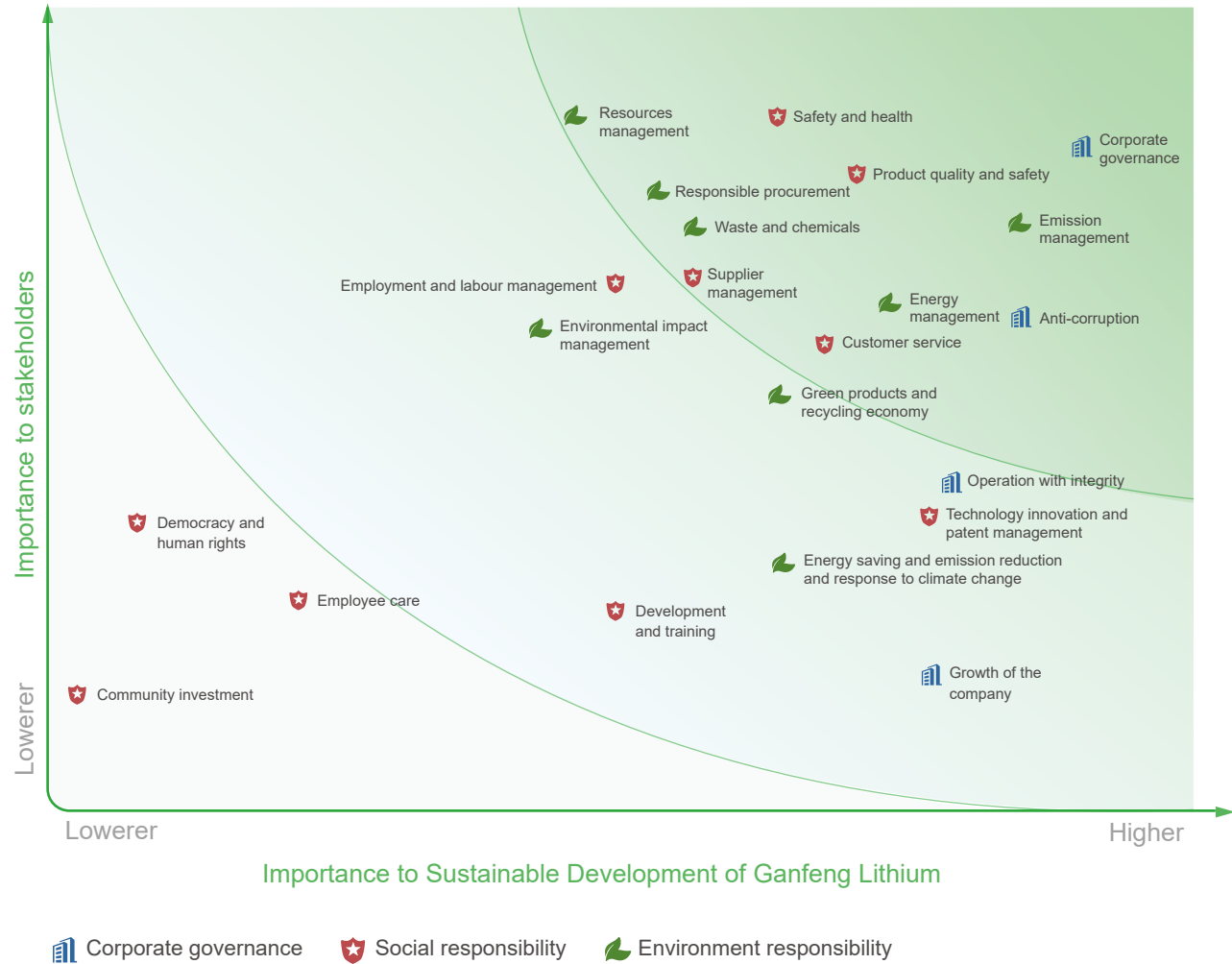
Stakeholders	Demand and Expectations	Means of Communication and Response
 Government	<ul style="list-style-type: none"><li>Complying with laws and regulations</li><li>Paying taxes according to law</li><li>Supporting economic development</li></ul>	<ul style="list-style-type: none"><li>Operating according to relevant regulations</li><li>Paying taxes according to law</li></ul>
 Shareholders	<ul style="list-style-type: none"><li>Return on investment</li><li>Business and profit growth</li><li>Risk management</li><li>Information disclosure</li></ul>	<ul style="list-style-type: none"><li>Timely disclosure of business information</li><li>Shareholders' meeting</li><li>Investment Summit</li><li>Roadshow</li></ul>
 Customers	<ul style="list-style-type: none"><li>Stable supply of goods</li><li>High-quality products and services</li><li>Meeting diverse needs of customers</li><li>Creating value for customers</li></ul>	<ul style="list-style-type: none"><li>Signing a long-term agreement</li><li>Guaranteeing service quality</li><li>Customer information protection</li><li>Customer satisfaction survey</li></ul>
 Employees	<ul style="list-style-type: none"><li>Safeguarding employees' rights and interests</li><li>Improving paths to development</li><li>Protecting occupational health</li><li>Balancing work and life</li></ul>	<ul style="list-style-type: none"><li>Providing good compensation and benefits</li><li>Improving paths to career development</li><li>Implementing employee training</li></ul>
 Partners	<ul style="list-style-type: none"><li>Open, fair and just procurement</li><li>Fulfilling contracts</li></ul>	<ul style="list-style-type: none"><li>Performing contracts according to law</li><li>Open tender</li><li>Carrying out project cooperation</li></ul>
 Environ-ment	<ul style="list-style-type: none"><li>Environmental protection</li><li>Energy savings and emissions reduction</li><li>Ecological conservation</li></ul>	<ul style="list-style-type: none"><li>Managing emissions</li><li>Improving resource and energy efficiency</li><li>Managing hazardous chemicals</li></ul>
 Society and the Public	<ul style="list-style-type: none"><li>Participating in community development</li><li>Supporting philanthropy</li></ul>	<ul style="list-style-type: none"><li>Participating in community development</li><li>Supporting philanthropy</li></ul>

# Materiality Analysis

In 2019, we carried out different forms of interaction and communication with stakeholders and completed a benchmarking analysis of the issues disclosed in peers' sustainability reports. With combination of the mainstream ESG ratings and indices in capital markets and in accordance with the requirements of the Appendix 27 ESG Reporting Guide to the Listing Rules on the Hong Kong Stock Exchange, sorted out the sustainable development issues related to the industry and the company. Upon discussion and screening by the Sustainable Development Office, we arrived at 22 sustainable development issues for the year.

The company used questionnaires to determine the extent and boundaries of disclosure of these issues to ensure accurate and complete disclosure of information related to operation and management. In 2019, we recovered a total of 12 copies of executive questionnaire and 116 copies of stakeholder questionnaire, and collected opinions and suggestions from all stakeholders on the company's sustainable development management which will serve as important basis and direction for the company's future. Based on the evaluation of all social responsibility issues by stakeholders and executives, the company's 2019 materiality matrix on sustainable development was finalised and reported to the company's board of directors for approval.

Materiality matrix of sustainable development issues of Ganfeng Lithium in 2019



# Response to UN SDGs





## Compliance First to Strengthen Cornerstone of Governance



Compliance operation is the cornerstone of the company's healthy development. Adhering to well-defined corporate governance standards, Ganfeng Lithium has established a strict governance structure to effectively implement the internal control management system and risk management mechanism and resolutely eliminate corruption, thereby ensuring its long-term operation and profitability.





# Improving Corporate Governance

As an "A+H shares" listed company, Ganfeng Lithium has always strictly observed relevant regulations such as the *Company Law*, *Securities Law*, *Listed Company Governance Guidelines*, *Shenzhen Stock Exchange Listing Rules*, *Guidelines for Standardized Operation of Listed Companies of Shenzhen Stock Exchange*, and *Listing Rules of the Hong Kong Stock Exchange*. In 2019, the Company revised its *Articles of Association* in accordance with the latest requirements of regulatory authorities and the actual situation of the company. Through continuous improvement of an effective corporate governance structure, the company has refined its corporate governance to protect the interests of shareholders and investors to the greatest extent.

The company attaches great importance to the diversity of the board of directors by actively unleashing the advantages of female managers and optimising its governance and management structure. The company's board of directors includes 4 internal directors and 6 external directors, of whom 6 are males and 4 females. The company's senior management consists of 6 males and 3 females.

10 meetings of the Board of Directors

8 meetings of the Board of Supervisor

4 meetings of the Audit Committee

2 meetings of the Nomination Committee

2 meetings of the Remuneration and Assessment Committee

7 meetings of the Strategy Committee

The 2018 annual shareholders' meeting

2 extraordinary shareholders' meetings

2 class meetings of A-share shareholders

2 class meetings of H-share shareholders



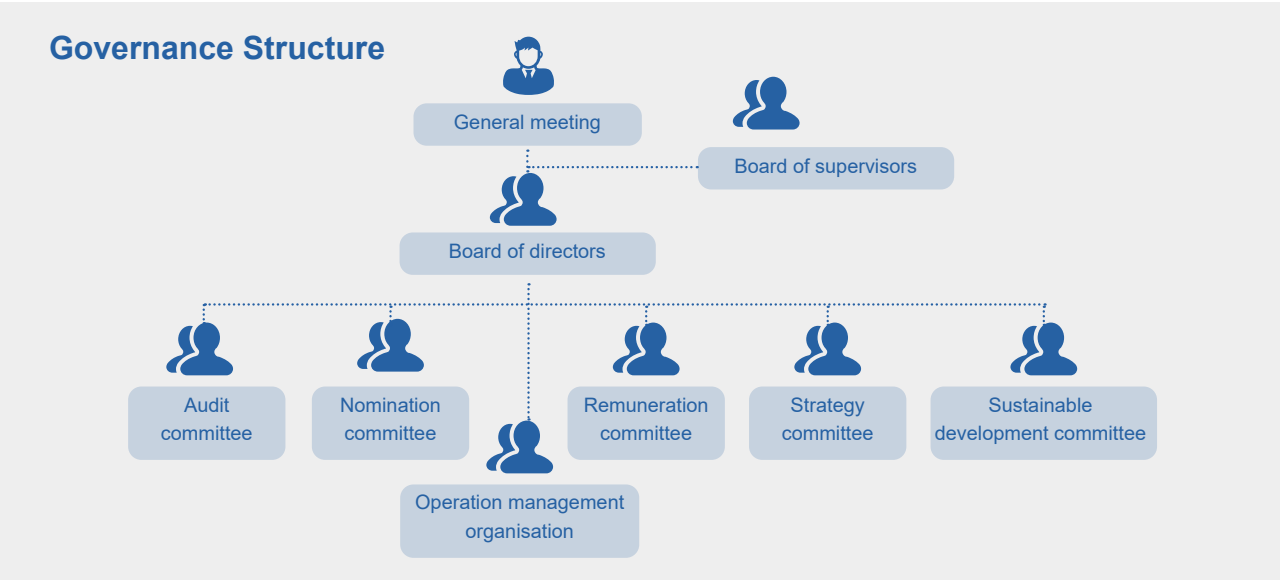
10 meetings of the Board of Directors



8 meetings of the Board of Supervisor

The company maintains close communication with shareholders to timely understand their expectations and requirements of the company and guarantee the legitimacy and effectiveness of its decisions. In addition, we value the return on investment of shareholders. Since the A-share listing in 2010, the company has provided cash dividends steadily to shareholders for nine consecutive years.

The shareholders' meetings held by the company all adopted online voting and the votes of small and medium investors were counted separately to maximise their participation in decision-making. The company listened carefully to the voices and suggestions of small and medium investors and adopted reasonable ones after measured demonstration to guarantee the interests of small and medium investors.



## Case

### Special training on corporate governance

In March 2019, the company invited Tong Hao, the director of conference planning of Computershare Hong Kong Investor Services Limited (CHIS) to give a special training session on "Improving Corporate Governance: How to Hold "A + H" Shareholders' General Meetings". This session expounded Hong Kong's registration and settlement structure, Hong Kong's shareholder meeting process and the difference in shareholders' meetings between the two places among other issues. The Company's secretary of the board of directors, the person in charge of "A + H" shares information disclosure of the Securities Department, and the heads of relevant departments such as the Financial Accounting department participated in the training. The training laid a solid foundation for further improving the company's corporate governance structure, standardised operation, information disclosure and services to investors.



## Information Disclosure

The company strictly observes and implements the information disclosure management regulations of China Securities Regulatory Commission, Shenzhen Stock Exchange and Hong Kong Stock Exchange; and fulfils its information disclosure obligations to ensure truthfulness, accuracy, completeness, timeliness, and fairness such that there is no selective disclosure. We also proactively accept supervision by the market and society to protect investors' right to know.


In 2019, the company further refined its management structure and set up teams responsible for A-share and H-share information disclosure and investor relationship management. The clear division of labour and coordination enabled investors to fully understand the company's development status and improved communication efficiency.

In 2019, the company disclosed the 2018 annual report, the 2018 sustainable development report, the 2019 interim report, 102 listing-related temporary announcements and 132 domestic regulatory announcements. There were no clarification announcements and our information disclosure on the Shenzhen Stock Exchange was rated "good" in the assessment.

## Investor Communication

The company has established regular and effective communication channels for domestic and foreign investors, including online interactive platforms, investor hotlines, regular email exchanges, online performance briefings and on-site exchange activities. In 2019, the company established "Investor Reception Day" as an event on regular basis, held an investor strategy meeting to communicate the company's operating performance, discuss major changes in industry policies and progress of material issues and upgraded its official website using new media and WeChat Subscription to update the company's dynamics in a timely manner.

In 2019, the company conducted six on-site investor exchange activities and one online Collective Investor Reception Day event; communicated with investors more than 200 times by phone and email; received more than 300 institutional investor and analyst representatives; and responded to a total of 180 questions from investors through the interactive platform of Shenzhen Stock Exchange enabling investors to understand the company thoroughly.



In 2019, the company conducted

6 on-site investor exchange activities

1 online Collective Investor Reception Day event



Case

Collective Investor Reception Day for listed Companies in Jiangxi Province in 2019

On 26<sup>th</sup> June 2019, Mr. Li Liangbin, Chairman of the company, Ms. Yang Manying, the person in charge of finance and Ms. Ouyang Ming, the secretary of the board of directors, jointly attended the 2019 Collective Investor Reception Day for listed companies in Jiangxi. At the event with the theme of candid communication and regulated development for win-win cooperation, representatives of the company had a hearty exchange with investors, answering questions about its development strategies, operating conditions, financing plans, equity incentives and sustainable development among other issues of concern to investors.



Case

Collective investor reception day

The company sets Collective Investor Reception Day every month. On this day, investors are invited to visit the company and factories to get insights into the company's operating conditions, which facilitates investors to fully understand the company's long-term value and helps the company to establish a good image in capital markets.



Business unit level

Each business unit implements dynamic management of major risks through strategic review, special risk governance, internal audit and special inspection and self-internal control assessment, among other measures.



Special risk governance level

The company has formed a special risk governance and foundation system optimisation governance model, further implementing risk control measures in foundation management systems involving business positioning, organisational structure, job responsibilities and authority delegation, information systems and management reports, and so on to facilitate special risk management.

Case

Information security risk management

In 2019, in order to effectively protect its information assets, the company introduced the enterprise information supervision system IP-guard. IP-guard features encryption and decryption systems to help companies detect violations, reduce losses and retain evidence in a timely manner, thereby effectively preventing the loss of corporate information assets.



The company has tightened management of print files by setting two-dimensional codes for information on print files to prevent it from leaking. Moreover, it is required to sign and archive important documents to ensure confidentiality.

IP-guard enterprise information supervision system

Case

Spodumene calcium silicate slag risk management

A large amount of spodumene calcium silicate slag is produced during the company's production process. To this end, the company carried out a comprehensive assessment of the calcium silicate slag risk, formulated countermeasures and actively implemented them to greatly reduce potential environmental compliance risks which turned the risk into an opportunity for additional value:

Researching the composition of various types of calcium silicate slag and their possible application scenarios

Improving technology for separating calcium silicate slag and establishing a large warehouse to store various types of calcium silicate slag to reduce the risk of dust (In 2019, the company added nearly 50,000 square meters of storage area.)

Expanding the sale of calcium silicate slag and broadening its applications to make the best use of it.



Reinforcing risk management and control

The company continuously bolsters its risk management system by carrying out risk management competitiveness evaluation on a regular basis. In 2019, based on the IATF 16949 system, the company carried out a management review to comprehensively and effectively identify the risk points existing in the company. Internal and external factors and needs of stakeholders were reviewed in order to reasonably avoid potential risks and strengthen the company's risk management. The management review required the addition of such contents as environmental factors and hazard sources identification, departmental knowledge collection and management, departmental risk identification and management, etc. into the range of responsibilities of all department heads to ensure the effectiveness and comprehensiveness of risk management.

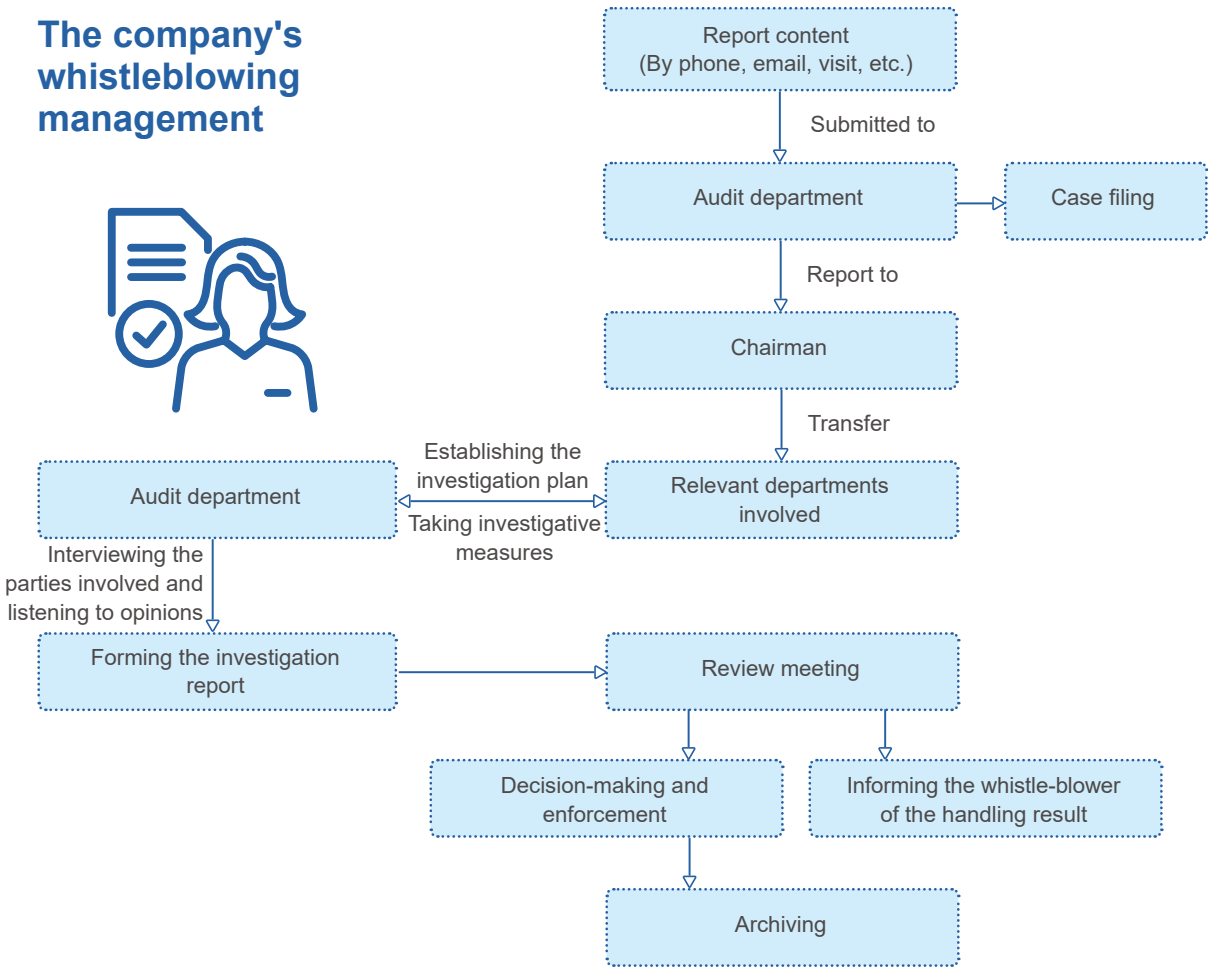
The company used Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis to identify and evaluate each risk point, creating the risk identification and evaluation control form for internal and external factors and the risk identification and evaluation control form for related parties' demands and expectations. These forms are used to guide and coordinate the implementation of risk management objectives and the response to risks at all levels. We also unified risk evaluation standards to fortify the company's overall risk management.

# Anti-Corruption and Pro-Integrity

Integrity and self-discipline are the consistent corporate tenets of Ganfeng Lithium. The company has continuously improved the mechanism for supervising and reporting corruption, including an audit department established to formulate regulations and a disciplinary inspection and supervision team to investigate and handle reported cases. Adhering to the attitude of zero tolerance for corruption, the company has continuously optimised anti-corruption work.

In 2019, the company strictly implemented the anti-corruption and anti-bribery control procedures in accordance with relevant national policies, laws, rules and regulations, requiring employees in important positions, all customers, suppliers and contractors with whom the company has business dealings to sign the Letter of Commitment to Anti-Bribery and Anti-Corruption. This also helped to comprehensively strengthen anti-corruption management and control at all levels. The company formulated the anti-fraud and whistle-blowing system to clarify the anti-fraud responsibilities and the investigation procedures. We unblocked all reporting channels including whistle-blowing hotlines and email addresses posted on official websites, office areas, and whistle-blowing mailboxes, while taking protective measures for whistle-blowers.

## The company's whistleblowing management



The company regularly conducts anti-corruption training and champions the integrity of all employees by various means such as theme publicity and warning education. In 2019, the company successively conducted seven themed trainings on anti-corruption, anti-bribery and commercial safety, covering all employees with an attendance rate of 100% to solidify employees' ideological defence.

The anti-corruption training hours for the company's board of directors was **6** hours per person throughout the year.

The company has carried out anti-corruption culture propaganda with the theme of building a clean and upright style of work to create an efficient, honest and clean working atmosphere and achieved positive results. In 2019, the company rewarded many employees who refused commercial bribery and other improper business gifts with a 15% equivalent of bribe amount t and severely punished those who violated the regulations.

In 2019, the company rewarded many employees who refused commercial bribery and other improper business gifts with

**15%** equivalent of bribe amount

### Case

#### Anti-corruption declaration conference

On 6<sup>th</sup>, December 2019, the company launched the theme activity of Advocating Integrity and Self-discipline to Fight Corruption. All employees watched educational videos on integrity reminders, made solemn oaths against bribery and corruption, visited the Integrity and Self-discipline signboard exhibition and signed on the commitment wall. This activity strengthened the ideology and morality of all employees, setting up a line of defence against corruption and degeneration.



### Case

#### Anti-corruption lecture

On July 31 2019, the company launched a theme activity of advocating integrity and self-discipline to fight corruption: Analysis of judicial application to the crime of corruption and bribery which invited professor Huang Huasheng, Vice Dean and Doctoral Supervisor of Jiangxi University of Finance and Economics to explain the common types and punishment standards of job crimes in the form of combining legal provisions with real cases. This helped employees to fully understand the dangers and seriousness of job crimes and thus improve their sense of self-discipline and integrity.





## Technology-Driven Building of Lithium Industry Pioneer

In recent years, the company has constantly reported achievements in technological innovation and commercialisation of scientific research results. With increasing innovation capability for key core technologies, constant optimisation and upgrading of products and with remarkable results of industry-university-research cooperation, we have been approved as a national and provincial key scientific research project and platform. We also received national, provincial and ministerial sci-tech awards and became one of the most innovative companies in the global lithium industry.



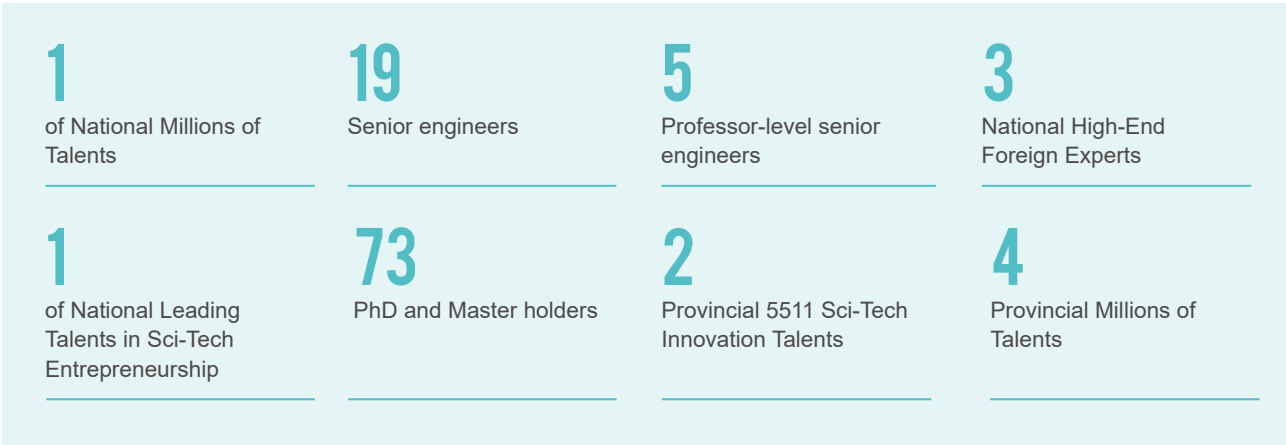


## Ensuring R&D Capabilities

The company boasts a number of scientific research platforms such as the National Enterprise Technology Centre, the National and Local Joint Engineering Research Centre for lithium-based new materials, National Postdoctoral Research Station, Academician Workstation, Jiangxi Provincial Lithium Battery New Materials Engineering Technology Research Centre, Jiangxi Provincial Key Laboratory and so on. A vanguard-facing, market-oriented and production-based three-tier technology innovation system has been established. In August 2019, with the approval of the Ministry of Human Resources and Social Security, the company's Jiangxi Lithium Battery New Materials and Application Industry Expert Service Base was upgraded to a national expert service base. The company will take this as an opportunity to further increase investment in scientific research, improve its technological innovation capabilities and service levels and build a domestic first-class expert service base. We will leverage the base's advantages in high-end talent leadership and technological innovation, strengthen communication and project cooperation with the expert team and boost the transformation and upgrade of the lithium battery new materials and application industries in China.



The company is a provincial-level talent demonstration site and post-graduate education base of the Jiangxi province. We also have a provincial-level superior sci-tech innovation team and a high-level innovation and entrepreneurship project introduction team of the Jiangxi province. A long-term incentive mechanism for talents has been established through career incentives and equity incentives. We have gathered a group of leading lithium battery professionals, including 361 sci-tech personnel of various types. The company's Chairman Mr. Li Liangbin has been selected into national talent projects such as National Millions of Talents and National Leading Talents in SciTech Entrepreneurship. Our chief scientist Dr. Xu Xiaoxiong is a part of the Hundred Talents Program of Chinese Academy of Sciences.



The company has tens of thousands of square meters of laboratories, including seven research laboratories on inorganic lithium compounds, organic lithium compounds, lithium battery materials, lithium metal smelting, lithium alloys, power and energy storage batteries and lithium battery recycling respectively. It also has six pilot plants equipped with more than 1,600 research and analytical instruments such as scanning electron microscopes (SEM), X-ray diffractometers (XRD), and gas chromatography-mass spectrometry (GC-MS) providing a solid guarantee for technological innovation.





## Persisting in Technological Innovation

The company improves its technological innovation capabilities to build its core competitiveness and implements a technology-driven industrial chain extension strategy. In 2019, the company's management innovation project — Lithium Battery New Materials Enterprise's Implementation of the Technology Innovation-Driven Industrial Chain Extension Strategy — won the second prize of National Enterprise Management Modernization Innovation Achievements.

In 2019, the company continued to consolidate its midstream technological advantages, made breakthroughs in upstream and downstream innovations and achieved a series of technological innovations throughout the industry chain.




Upstream

- The company signed a technology agreement with East China University of Science and Technology on the extraction of lithium from brine for the Mariana Lake Project in Argentina and jointly developed a new-generation lithium extractant and new-generation pulsed sieve plate extraction column. The project has basically determined the extraction process route.



Midstream

- The company developed battery-grade anhydrous lithium hydroxide products with huge market-worthy application potential.
- The company developed micro-powder lithium hydroxide products for high-end lithium battery applications, attracting downstream quality customers.
- The company developed high-purity lithium chloride, high-purity lithium fluoride and other products to increase the diversity of lithium compound products and expand the market-worthy applications.
- Breakthroughs were made in the drying process of lithium iodide products which is of great significance for industries using lithium iodide as electrolyte.



Downstream

- Important outcomes were achieved in the development of lithium sulphide products, allowing the company to take the lead in entering the solid-state battery industry, thereby effectively facilitating future market development.
- The research and development of solid-state batteries progressed steadily and the pilot production line is currently in the trial production stage.






Recycling

- Recycling spodumene slag to prepare ceramic additives addressed the pollution of tailings and the recovered lithium slag was used to produce high value-added products. This resulted in significant economic and social benefits.

In 2019, the company made more than 100 patent applications, obtained more than 60 patents and had a series of innovative achievements that won provincial and ministerial sci-tech awards. The Set Preparation Technology and Industrialization of Lithium Metal Anode and Core Raw Materials for Batteries with High Specific Energy and Key Technologies and Industrialisation of Efficient and Clean Recycling of New Energy Vehicle Retired Power Battery innovations won the Sci-Tech Award of China Nonferrous Metal Industry; Battery-grade Lithium Oxide Preparation Technology and Industrial Application for Lithium Power Batteries won the Jiangxi Provincial Sci-Tech Progress Award.

The company has presided over (or participated in) the formulation of five national standards including *Lithium*, *Lithium Belt* and *Anhydrous Lithium Chloride*, and 19 industry standards including: battery-grade lithium carbonate, battery-grade lithium oxide, n-butyllithium and lithium hydride. In 2019, the company participated in the formulation of five industry standards on products or analytical methods including *Battery-grade Lithium Hydroxide Monohydrate* and *Chemical Analysis Methods for secondary Battery Waste* to standardise the product market and lead the technological development of the industry.

### Ganfeng Lithium's technological innovations (by the end of 2019)

	Number of national patent applications made	Number of invention patent applications made	Number of utility model patent applications made
	392	246	146
	Number of patents obtained	Number of invention patents obtained	Number of utility model patents obtained
	175	57	118
	Number of computer software copyrights possessed		
	4		

Case

The company won the 20<sup>th</sup> China Patent Excellence Award

The company's invention patent — A Method and Device for Producing Crystalline Anhydrous Lithium Chloride — won the 20<sup>th</sup> China Patent Excellence Award. This national award not only showed the national recognition of the company's patented technology and innovation prowess, but also marked the company's significant progress in the commercialisation of intellectual property and entry into a new stage of high-quality technological commercialisation and development.

At the same time, the company conducts industry-university-research cooperation with major universities and research institutes to jointly build research centres, undertake major national and provincial projects and develop new products and new processes. Close cooperation has been established with such universities and scientific research institutes as the Chinese Academy of Sciences (CAS) Qinghai Salt Lake Institute, CAS Ningbo Institute of Materials Technology and Engineering, East China University of Science and Technology, China University of Geosciences (Wuhan), Tianjin University, Northwest Institute of Nuclear Technology, Hunan University of Technology and Nanchang University to form effective innovation cooperation mechanisms for commercialisation of scientific research results.





# Optimising Product Portfolio

By translating technological advantages into drive for product development, the company continuously optimises its product portfolio. In the midstream lithium processing segment, the company continuously increases R&D investment forming a product portfolio of more than 40 lithium salts, including lithium hydroxide, lithium carbonate, lithium metals and butyllithium. As downstream auto companies are increasingly demanding for lithium salt quality, the company developed micro-powder lithium hydroxide, anhydrous lithium hydroxide and other products to reinforce its strategic cooperation with world-class auto companies in 2019. In addition, the company successively developed high-purity lithium chloride, high-purity lithium fluoride, methyl lithium, caesium iodide, rubidium carbonate and other products to meet the needs of different market segments with a diversified product portfolio.



In the lithium battery sector, the company has a horizontal layout across various segments such as power, energy storage, communications, special vehicles, electronic cigarettes and TWS earphones to provide customers in more industries with high-quality products. The company has continued to invest in the research and development (R&D) of solid-state batteries. Our first-generation solid-state lithium battery products have passed a number of third-party safety tests and sample tests assigned by customers and entered the stage of technological upgrade and industrialisation. In 2019, the company invested in the establishment of a first-generation solid-state lithium battery (R&D pilot production line) with an annual output of 100 million watt hours to accelerate the commercialisation of solid-state lithium battery technology.

## Case

### Strategic cooperation with downstream auto companies

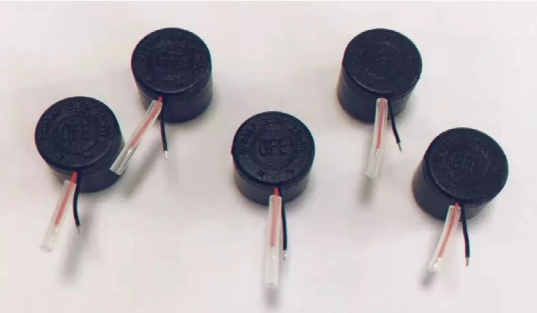
In 2019, Ganfeng Lithium and its wholly owned subsidiary Ganfeng International signed a long-term supply agreement with BMW Germany. The company and Ganfeng International will provide lithium chemical products to BMW's designated battery or cathode material suppliers in 2020-2024 to further deepen the long-term strategic cooperation between the two parties. In addition, the company continued to deepen cooperation with German Volkswagen and will provide lithium chemical products to German Volkswagen and its suppliers in the next decade, as well as cooperate with German Volkswagen on battery recycling and solid-state batteries.



## Case

### Market-worthy application of TWS earphone batteries

In 2019, the company made important progress in TWS earphone battery products, maintaining its lead in the development of the industry. The diversity of TWS market demands places higher requirements on batteries: smaller size and more stable performance. By seizing the opportunity in the field of consumer electronics for technological innovation and taking the lead in exploring market-worthy applications, the company successfully attracted OPPO, Edifier, Pisen, GLAB, JBL and other clients.





# Co-Creation of Value to Unleash Industrial Vitality



Ganfeng Lithium actively supports the development of national strategic emerging industries and fulfils its responsibility for the progress of the new energy industry. While developing, we keep in mind to join hands with upstream and downstream partners in the industry chain in order to continuously foster responsible supply chains, improve service quality and promote the healthy and sustainable development of the industry.





## Supporting National Strategic Emerging Industries

In 2010, the State Council issued the decision on accelerating the cultivation and development of strategic emerging industries, which identified seven strategic emerging industries in the country. Over the past decade, the strategic emerging industries have continued to grow, facilitating the country's high-quality development. Ganfeng Lithium supports the country's strategic emerging industries with practical actions including constant product optimisation and industrial upgrading that conform to the national strategic plan.

“

*We will significantly increase the proportion of new energy vehicles and new energy applications, comprehensively advance the construction of an efficient and energy-saving industry system featuring advanced environmental protection and resource recycling, and propel green and low-carbon industries such as new energy vehicles, new energy and energy conservation and environmental protection to become pillar industries.*

”

—The “13<sup>th</sup> Five-Year” National Strategic Emerging Industries Development Plan by State Council

### • New Energy Industry

The lithium battery industry is an important component of the development of new energy storage devices, new energy vehicles and other industries proposed in the outline of the 13th National five-year plan. The company has explored the new energy industry chain for more than 20 years and strategically covered five major sectors: lithium resources, lithium chemicals, lithium metals, lithium batteries and battery recycling committed to helping the global energy transformation.

A layout has been made for resources such as spodumene, brine, lithium mica and lithium clay to maintain a long-term stable supply relationship with upstream partners.

In terms of midstream smelting, the company's product portfolio covers more than 40 lithium compounds. Over the past 20 years, we have provided more than 200,000 tons of lithium salt products to the industrial chain to meet the various needs of customers. The company's lithium hydroxide and lithium carbonate products are one of the core raw materials for new energy power batteries. From 2015 to 2019, new energy vehicles equipped with Ganfeng's lithium salt products travelled more than 28 billion kilometres around the world. These new energy vehicles have helped reduce more than 7 million tons of carbon dioxide emissions to the society<sup>1</sup>.

In terms of downstream lithium batteries, the company's products cover power, energy storage and communications among other areas. In the future, the company's lithium battery products will be widely used in urban new energy buses, airports, subways and other public transportation systems to help the development of green cities.

In terms of battery recycling, the company has made a forward-looking layout in the resource recycling business, adding impetus to the sound development of the new energy industry.

<sup>1</sup>The calculations were based on data from the Tesla Impact Report.

### Case

#### Expanding the range of upstream resources

Based on the existing spodumene and brine resources, the company actively taps new lithium resources and further expands the upstream overseas investment. In 2019, the company acquired 29.99% equity of Bacanora and 22.5% equity of Bacanora's lithium clay project company Sonora and obtained the exclusive right to sell 50% of lithium products from the first phase of the Sonora project. The abundance of raw materials guarantees the company's continuous and stable supply of new energy and high-quality products helping the new energy industry to take off.



### Case

#### Launching the transformation and expansion of the Basic Lithium Plant

In order to meet the huge demand from downstream new energy vehicle market, the company started the construction of the third phase of the lithium hydroxide project in 2019. After the transformation and expansion, the project will have a total annual output of **50,000 tons** of battery-grade lithium salts to lay a solid foundation for the endurance of new energy vehicles.



### Case

#### The energy storage projects of Ganfeng Battery

Ganfeng Battery has the capabilities to supply and construct large-scale energy storage projects, and has successively participated in grid-side energy storage, user-side energy storage and photovoltaic energy storage projects. In a prompt response to national calls, Ganfeng Battery's energy storage projects discharged **2,218MWH** of electricity in 2019, helping enterprises save electricity costs. In November 2019, Ganfeng Battery completed **the largest monomer user-side energy storage project in China** with a capacity of **54.2MWH** and an estimated annual power generation of **26,400MWH**.

In the future, Ganfeng Battery will continue to advance energy storage battery projects, focusing on the production of new energy battery materials and battery cells in order to provide customers with high-quality energy storage products and spur the development of renewable energy.

• Energy Saving and Environmental Protection Industry

As the collective decommissioning of lithium batteries for electric vehicles is peaking, the recycling and environmental-friendly treatment of a large number of decommissioned lithium batteries has garnered close attention from the society. Facing this challenge, the country is promoting the development of power battery recycling standards and accelerating the development of lithium power battery recycling and echelon utilisation industries.

The company has taken the lead in seeing future market demand and seized the opportunity to become one of the global leaders in the lithium battery recycling industry. While creating business opportunities, we proactively assume social and environmental responsibilities by launching a comprehensive recycling project for retired lithium batteries and realising the comprehensive recycling of resources such as lithium, nickel, cobalt and manganese. At the same time, we actively seek to establish long-term strategic partnerships with customers of downstream product applications to jointly establish a green ecological industrial chain. In 2019, the company put into operation a comprehensive recycling project with an annual capacity of **34,000** tons of decommissioned lithium batteries. In the future, we will build a large-scale comprehensive facility that can recycle **100,000** tons of decommissioned lithium batteries annually. The company's comprehensive recycling layout for retired lithium batteries not only helps to protect the company's lithium raw material sources and integrated upstream and downstream development strategies, but also sets an example for the whole society in resource recycling and environmental protection.



Retired lithium Lithium Battery Comprehensive Recycling Project

2019

lithium iron phosphate pole pieces, lithium iron phosphate powder, and lithium iron phosphate cores treated

9,688 tons

ternary pole pieces, ternary powders and ternary cores treated

5,611 tons

lithium iron phosphate batteries and ternary batteries treated.

1,200 tons

lithium chloride produced converted in 100% purity,

2,641.48 tons

with a year-on-year increase of

21%

Ni, Co and Mn produced

2,463.9 tons

with a year-on-year increase of

39%

among which produced from retired li batteries

263.9 tons

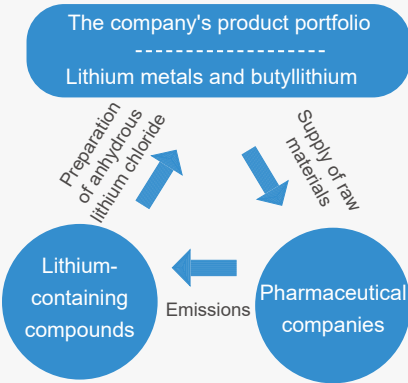
with a year-on-year increase of

41%

Case

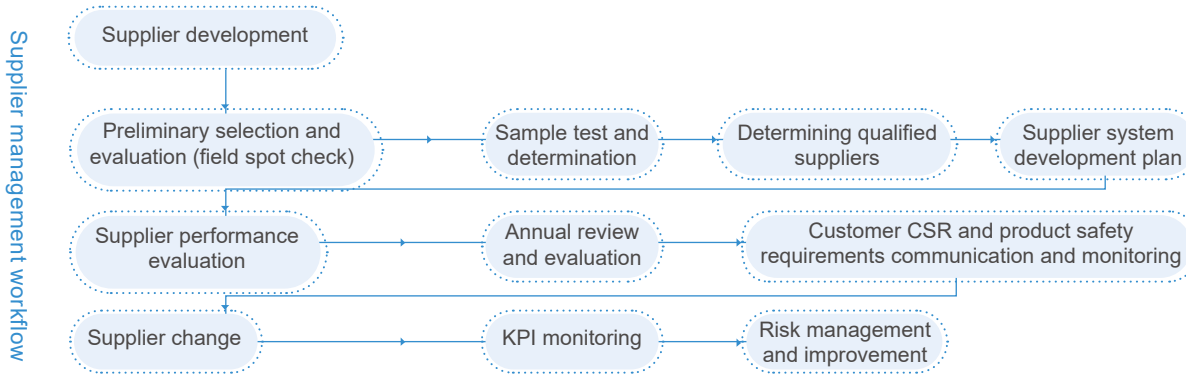
Recycling of lithium compounds in the pharmaceutical industry

The company not only deploys for retired lithium battery recycling business, but also actively explores the value of resource recycling in other product application areas in order to help downstream customers address the pain points in environmentally friendly treatment. The company's lithium metal products are used in the pharmaceutical industry. We have innovatively developed a method for preparing anhydrous lithium chloride by recycling and treating lithium-containing compounds, which not only addresses the treatment of lithium-containing compounds in medicine, but also helps pharmaceutical companies save production costs. In addition, the resulting anhydrous lithium chloride can be used as a raw material to produce lithium metals, realising a virtuous circle of the industry. In 2019, the company recovered a total of 10,817.9 tons of lithium-containing compounds in the pharmaceutical industry and produced 2,944.6 tons of anhydrous lithium chloride converted in 100% purity.



Co-building of Responsible Supply Chains

The company has formulated the *Administrative Measures for Bidding, Negotiated Tendering and Contract Review and Evaluation* and the *Supplier Management Procedures* for carefully selecting qualified suppliers of production materials and equipment. We comprehensively evaluate suppliers on the criteria of manufacturing, quality control, innovation ability, social responsibility, etc. in order to build a transparent supply chain. By the end of 2019, the company had a total of 453 suppliers in Jiangxi province, 2,132 outside the province, 6 international suppliers. We conducted the annual audit of 13 suppliers during the year.



Case

Supporting small and medium suppliers

The company helps cooperative suppliers to expand production scale, enrich product portfolio, improve product quality, and promote product certification, by working with the small and medium-sized enterprises in the supply chain to make common progress.

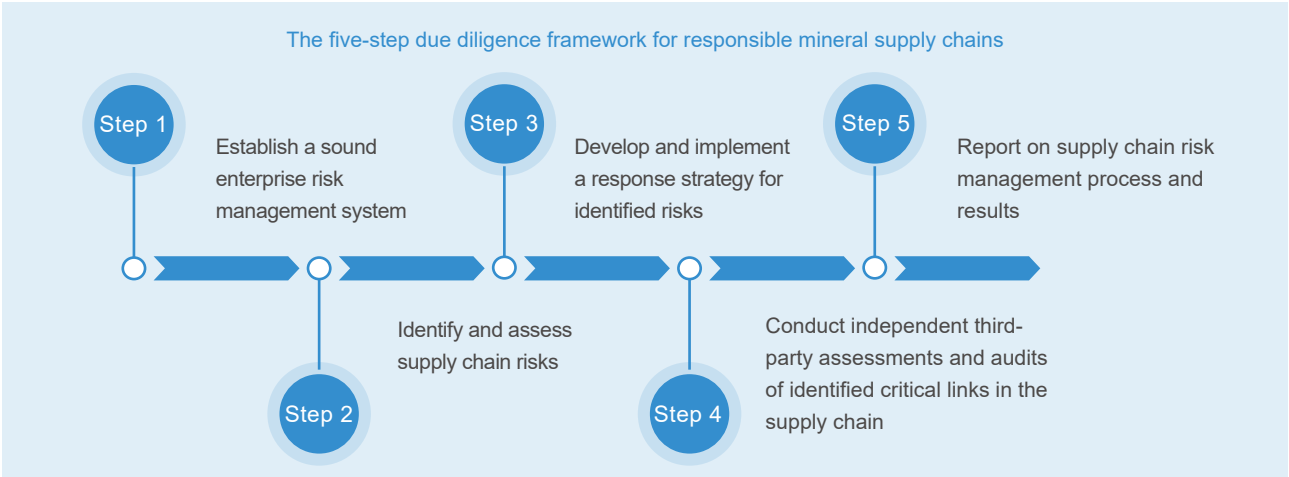
There are many small packaging product suppliers in the Company's supply chain. Such enterprises are generally small in scale and difficult to engage in streamlined and standardised production. After our cooperation with a local packaging factory, the factory's product range has expanded from a single woven bag to multiple products such as high and low pressure inner bags, wrapping films, agricultural films, mulch films, etc. In 2019, the factory's products passed ISO9000 certification and their sales doubled.



• Building Sustainable Supply Chains

The company incorporates the concept of sustainable development into the procurement process by actively purchasing environmentally friendly products and services and prioritising procurement from responsible suppliers. The company has formulated the *Code of Conduct for Suppliers* to guide and regulate supplier behaviour in terms of law-abiding operations, compliant employment, resource consumption, emission control, health and safety, and business ethics. This code also encourages suppliers to assume more environmental and social responsibilities. The company requires all suppliers to sign the commitment to the code of conduct for suppliers and encourages upper-level suppliers to recognise and adopt Ganfeng Lithium's code of conduct for suppliers.

The company needs to purchase a small amount of cobalt metal for the production of ternary precursors. For this, we follow the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*, *Social Responsibility Guidelines for China's Overseas Mining Investment*, *China's Due Diligence Guidelines for Responsible Mineral Supply Chains* and other documents. We also follow the three goals of the *Responsible Cobalt Initiative (RCI)*. We have formulated the code of conduct for suppliers, due diligence control procedures for responsible mineral supply chains and responsible mineral checklist for suppliers among other documents to conduct sustainable management of the supply chains of relevant mineral raw materials. This code also supports to identify, prevent and reduce risks that may cause conflicts, serious violations of human rights and serious negligence, improve supply chain governance capabilities and build responsible supply chains. At the same time, we apply the above-mentioned responsible supply chain management measures to the lithium supply chain.



Ganfeng Lithium Pledges

- Where identifiable:
- To not use minerals from Risk I territories<sup>1</sup>
  - To control and continuously improve the use of minerals from Risk II territories<sup>2</sup>
  - To prioritise the use of internationally available list of legal minerals
  - To identify, manage and avoid serious human rights violations in business activities
  - To identify, manage and avoid direct or indirect support to illegally organised armed groups and public or private security forces in business activities
  - To eliminate corruption, money laundering and other corrupt practices in business activities
  - To protect employees' occupational health and safety



<sup>1</sup> Risk I territories refer to areas of armed conflict including Eastern Province, North Kivu, and South Kivu (gold mines) in Democratic Republic of the Congo (DRC) and neighbouring Rwanda wary of the conflict involving the five Great Lakes regions in Africa.

<sup>2</sup> Risk II territories refer to areas where child labour is used or where human rights are seriously violated, including Katanga (Cobalt, Copper) in the DRC.

Value Creation Through Service

While developing rapidly along the industry chain with horizontal layout, the company is committed to product quality and continuous improvement in customer service. We conduct customer satisfaction surveys on a regular basis to track and upgrade service quality, improve the customer complaint handling mechanism and provide customers with products and services of the highest quality and maximum value.

The company has formulated a strict product production process and quality control system, fulfilling quality control responsibility to the extent of basic operations and linking it directly with its employees' daily performance assessment to ensure effective product quality control. In 2019, the company continued to strictly implement the *Quality Management System*, *Design and Development Control Procedures*, *Production Process Control Procedures*, *Process and Product Monitoring and Measurement Control Procedures*, and *Nonconformity, Correction and Precautions Control Procedures*, and other normative documents, which controls all aspects from process research and development. This also helped improve engineering design, product production and analysis to inspection and acceptance, along with reducing the risk of error and guaranteeing product quality.

Case

Advancing the construction of IATF 16949 system

In 2019, the company advanced the construction of the international automotive industry's technical specification system — IATF 16949 to meet the downstream auto companies' demand for product quality. The IATF 16949 system will help the company improve operating performance, reduce quality costs and increase customer satisfaction and production delivery efficiency. It will also help improve the quality management concept and quality literacy of all employees.

In order to ensure sound after-sales services, the company has established systems such as *Post-delivery Related Management Regulations*, *customer complaint management*, *customer return and exchange management regulations*, and *Customer Satisfaction Survey Procedures*. For the handling of customer complaints, the company timely analyses the reasons and arranges special personnel to follow up and implement the rectification. The entire process from receiving and processing requests to responding and providing results is completed within three days to address customer concerns in a timely manner and the complaints are analysed for continuous improvement. In 2019, the company received a total of 95 complaints which were promptly and properly handled; no product recall incidents due to health or safety hazards occurred.

In 2019, the company conducted a comprehensive survey of customer satisfaction from nine aspects, including product quality, delivery quality, packaging quality and service attitude. The customer satisfaction score was 93.04, an increase of 0.17% over last year. This survey identified potential deficiencies and risks of the company in a timely manner, provided opportunities for prevention and correction, and effectively helped the company to continuously improve and provide better products and services.



Case

Ganfeng Testing serves peripheral enterprises

Ganfeng Testing has third-party testing qualifications. Since its establishment, it has not only undertaken environmental monitoring tasks for internal activities and projects under construction, but also provided monitoring services to peripheral enterprises and environmental protection authorities. Ganfeng Testing participated in environmental sampling and testing of environmental monitoring stations in Yushui district and high-tech zone to promote the compliant discharge of peripheral enterprises. In terms of lithium battery material testing, Ganfeng Testing uses its proprietary advanced testing equipment to provide accurate data analysis for peripheral lithium battery companies, providing guarantee for their technological transformation and product development while continuing to create value for the society.



# Cleaner Production and Focusing on Green Operations

Ganfeng Lithium proactively aligns itself with the needs of tackling climate change and optimizing national energy structure by promoting the application of energy saving and environmental protection technologies, exploring the potential of resource utilisation and actively carrying out environmental performance assessment. This helps the concept of green development run through its production and operations.



6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION





# Improving Environmental Management



By researching its own development characteristics and advanced environmental management experience, the company has formulated a comprehensive environmental management system to continuously improve its environmental management. We have obtained the ISO14001 environmental management system certification and have been selected into the first batch of national-level green factories. The company has set up an environmental protection leading group with the general manager as the group leader and the heads of various departments and workshops as the first persons responsible for environmental management in order to ensure the implementation of various environmental management tasks.

In 2019, the company's main environmental management tasks are as follows:

- Comprehensively revising and improving the environmental management system to further its comprehensiveness.
- Establishing a cleaner production promotion management office, formulating the cleaner production management system and a continuous cleaner production plan. In 2019, the company's three factories passed the clean production acceptance, reaching the advanced level of cleaner production in the industry.
- Developing an energy-saving and consumption-reduction assessment system, implementing refined management and completing the environmental targets.
- Establishing a workshop aimed at energy-saving and consumption-reduction assessment mechanism and a corporate clean production incentive mechanism to facilitate the achievement of environmental goals.
- Promoting the environmental management system certification of the headquarters and branches to further standardise environmental management. The company and its seven subsidiaries passed the ISO 14001 environmental management system certification.

No environmental complaints were filed and no environmental penalties issued in 2019.

Environmental protection investment in 2019 was RMB **122.84** million.

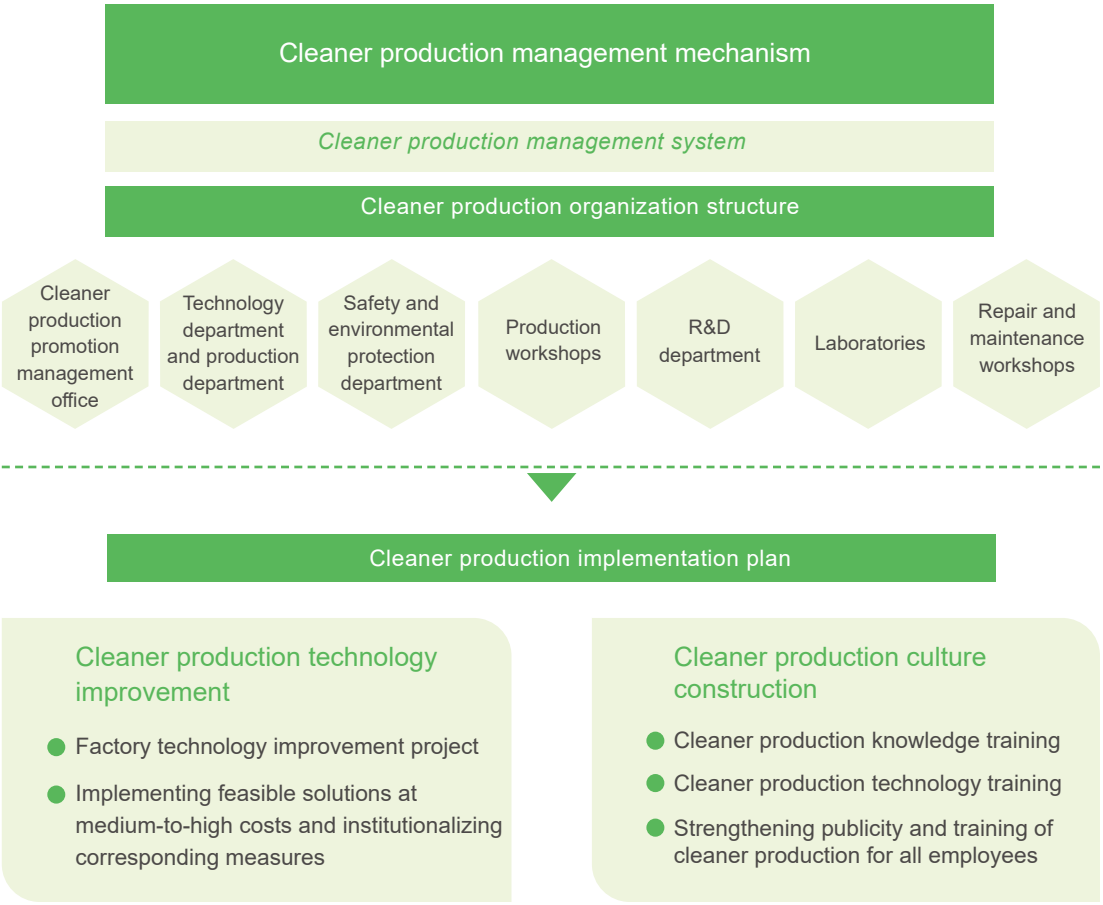


## Ganfeng Lithium environmental management system

- Environmental protection regulations
- Environmental protection responsibility system
- Environmental laws and regulations collection management system
- Environmental management system in production process
- Environmental protection training and education management system
- Online monitoring facility operation management system
- Environmental equipment management system
- Environmental management system for construction projects
- Environmental protection archives management system
- Environmental risk assessment management system
- Environmental monitoring and measurement management
- Corporate environmental operation management








The green factory certificate



In order to improve the efficiency of environmental management, the company's Basic Lithium Plant has formulated systems such as exhaust gas emission management, water resources management, and carbon emission management to identify risks from exhaust gas, water resources and carbon emissions. At the same time, statistical analysis was made on relevant data for 2017-2019. Combined with forecasts of operating and production data, we set the 2025 target with 2019 as the base year to guide the company in implementing a series of measures to reduce emissions and consumption.

Basic Lithium Plant 2025 Target for Environmental Management (Compared with 2019)

	Exhaust gas
	To reduce NO <sub>x</sub> emissions per ton of LCE by <b>5%</b>
	To reduce SO <sub>2</sub> emissions per ton of LCE by <b>1%</b>
	
	To reduce the emission of particles per ton of LCE by <b>5%</b>
	Water use
	To reduce water consumption per ton of LCE by <b>20%</b>
	To increase water circulation rate by <b>20%</b>
	
	Energy consumption and carbon emissions
	To reduce carbon dioxide emissions per ton of products by <b>10%</b>
	
	To reduce coal consumption per ton of products by <b>6%</b>

Striving for Lower Emissions

The company abides strictly by relevant national laws and regulations such as the *Environmental Protection Law of the People's Republic of China*, the *Law of the People's Republic of China on Water Pollution Control*, the *Law of the People's Republic of China on Air Pollution Prevention and Control* and the *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Wastes*. We actively respond to the "blue sky and clear water defence war" by cooperating with local environmental authorities to strictly monitor and control industrial waste emissions and strive to minimise pollutant emissions. At the same time, the company uses its professional advantages to form a circulation system within the industry, turning waste into resource to significantly reduce pollutant emissions.

Case

Taking cleaner production to a higher level

The company has established a leading group and working group for cleaner production audit. In 2019, 33 projects were carried out including improvement of the production process, wastewater and the waste materials process. In order to ensure the effective implementation of the cleaner production program, the company regularly organises cleaner production education and training at different levels. It has established a comprehensive daily management and audit mechanism for cleaner production.

After the audit, the overall cost of raw materials and auxiliary materials consumption per unit of product decreased, resource utilisation efficiency was effectively improved, pollutant emissions decreased and the company's clean production reached the advanced level in the industry.



Electricity consumption per unit of product ↓ **0.76%**  
Water consumption per unit of product ↓ **19.16%**  
Comprehensive energy consumption ↓ **0.79%**

Wastewater

The company vigorously advocates the recycling of wastewater by installing online monitoring facilities at the main wastewater discharge outlets in strict accordance with the inorganic chemical industry pollutant discharge standards and the take-over standards of the sewage treatment plant, hence the compliance rate of wastewater discharge of 100% in 2019.

Case

Zero discharge of wastewater

Ganfeng Recycling's battery-grade lithium fluoride project recycles mother liquor multiple times to reduce water use and wastewater discharge. The project's water recycling rate is 82.8%.

Ganfeng Electronics and Ganfeng Battery have carried out technical transformation of wastewater treatment facilities so that the wastewater from cleaning is recycled after undergoing grilling, biochemical and sedimentation processes for equipment cleaning.



Permitted COD emissions: **39.72 TONS**  
COD emissions: **34.53 TONS**

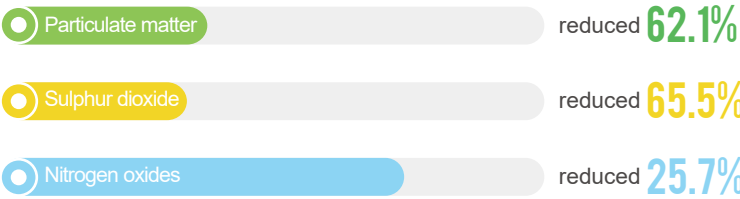


Permitted ammonia nitrogen emissions: **0.94 TONS**  
Ammonia nitrogen emissions: **0.76 TONS**

Exhaust Gas

The exhaust gas emissions from the company's production process are mainly boiler exhaust gas and tail gas from drying in the lithium salt sector. Online monitoring facilities are installed at the main discharge ports and all indicators meet national environmental requirements. In 2019, the company actively promoted lithium chloride three-efficient transformation, rotary kiln desulphurisation technology transformation, acidification kiln transformation and other projects. A total of RMB 24.539 million was invested, which could save 2,207.6 tons of standard coal and reduce 80.99 tons of nitrogen oxide emissions, 48.56 tons of dust emissions and 33.49 tons of sulphur dioxide emissions.

Exhaust gas emissions per unit of product of the Basic Lithium Plant in 2019 (compared with 2018)



Case

Desulphurisation and denitrification to reduce coal-fired boiler emissions

In 2019, the company carried out desulphurisation and denitrification of the 50-ton boiler at the Basic Lithium Plant by installing new desulphurisation tower components, fly ash circulation devices, flue gas recirculation devices and SNCR (ammonia spraying) devices. After the transformation, the emission concentrations of sulphur dioxide and nitrogen oxide has stabilised below 100 mg/Nm³. After the desulphurisation of the acidification kiln, there is basically no acid mist discharged from the outlet of the electric demister chimney; the sulphur dioxide content is less than 50 mg/Nm³; the sulphuric acid mist content at the outlet is 20-50 mg/Nm³. Owing to the advanced and environment-friendly equipment, the emission reduction effect was significant, winning the 2019 Air Pollution Prevention Special prize that was issued by the central government.

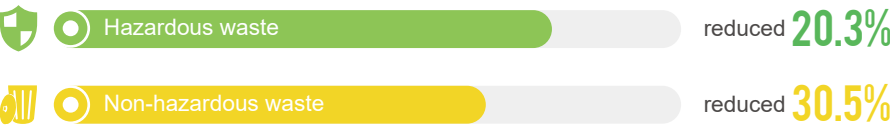




• Waste

All the company's solid waste is stored by category and harmlessly treated. The company's general solid waste includes boiler slag, coal slag, tailings feldspar powder, raw material packaging paper (boxes), etc.. Its hazardous waste includes coal tar, waste oil, waste white oil, lithium residue, etc. For hazardous waste, the company strictly implements the Five-Part Bill management in accordance with relevant regulations such as the national hazardous waste list, and hires qualified third-party agencies to properly recycle and treat it.

Waste emissions per unit of product of the Basic Lithium Plant in 2019 (compared with 2018)



Optimising Resource Utilisation

The company continuously optimises energy consumption management, improves production processes and increases the efficiency of comprehensive utilisation of energy and natural resources in order to reduce resource consumption and waste.

• Energy-saving Technological Transformation

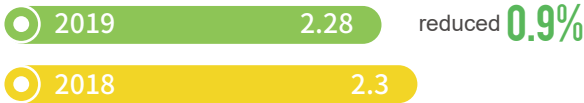
The company strictly implements relevant systems such as the energy management system, and measures for evaluation and assessment of energy-saving targets-oriented responsibility, and energy-saving reward and punishment system to advance the construction of the energy management system, while actively promoting new technologies, new processes, new materials and new equipment to continuously improve the energy-saving level of production processes and equipment.

In 2019, the company fulfilled its responsibility as an entity for energy conservation and emission reduction by setting targets and linking environmental performance with executive performance. In addition, the company tracked and monitored the trend of energy consumption indicators through monthly data analysis and early warning mechanisms. About 40 environmental expert review meetings were held to adjust its work deployment in a timely manner.

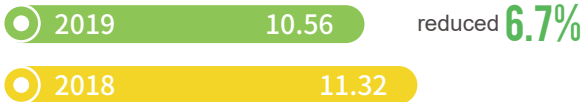
During the year, the consumption of 10,000 yuan output value of various types of energy and water resources decreased year-on-year.

Comprehensive energy consumption per unit of product declined

Lithium chemical sector (ton of standard coal per ton of LCE)



Lithium battery sector (ton/MWH)



Case

Optimising coal types to improve energy efficiency

In 2019, the company launched the transformation of coal-fired boilers, adopting coal-to-steam conversion in the lithium hydroxide monohydrate project, replaced the coal-fired boilers with natural gas boilers at Ganfeng Recycling and replaced the anthracite with a calorific value of about 4,000 kcal per kg to the bituminous coal with a calorific value of about 6,000 kcal per kg at the Basic Lithium Plant. This effectively reduced exhaust emissions and energy consumption per unit of product. By optimising coal types, the company reduced its energy use

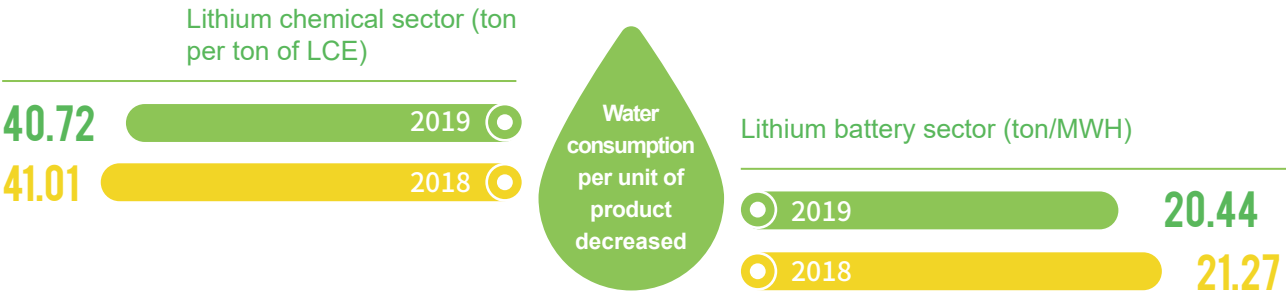
by more than 20,000 tons of standard coal in 2019.





• Efficient Use of Water Resources

In order to enhance its water management capabilities, the company has formulated a water footprint plan to increase recycling through such measures as steam condensate reuse. In addition, the Basic Lithium Plant plans to launch the construction of an ecological lake to pool the purified industrial wastewater, which will then be reused for cleaning highways, watering trees and cleaning roads in factories, thereby promoting efficient use of water resources.



Case

Water utilization efficiency continuously improves at the Basic Lithium Plant

Since June 2015

the first phase of the project has achieved water saving and wastewater discharge reduction of **48,000** tons per year through the technical reform of steam condensate reuse.;

Since July 2015

the first phase of the project has achieved water saving and sewage discharge reduction of **243,000** tons per year through the technical reform of soft water reuse.;

Since March 2018

the second phase of the project has achieved water saving and sewage discharge reduction of **288,000** tons per year through the reuse of condensate from circulating water stations.



• Secondary Use of By-products

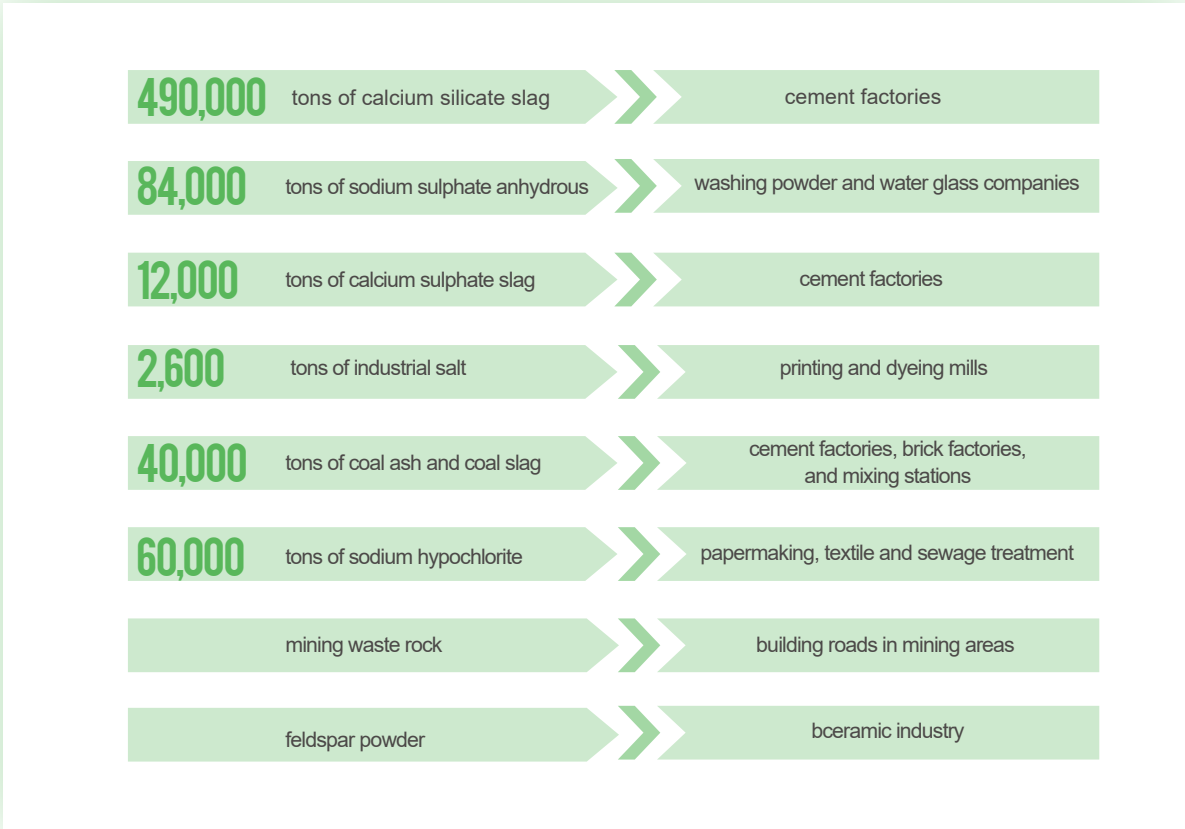
The company vigorously promotes a circular economy by fully tapping the resource utilisation potential at the end of the production process. We have established an industrial symbiotic relationship with several companies in the cement and glass industries to turn waste into resource. In 2019, the company transferred 961,700 tons of by-products to the downstream for comprehensive utilisation.

In 2019, the company transferred

**961,700** tons of by products to the downstream for comprehensive utilisation



Secondary utilisation of by-products in 2019



Case

Helping reduce carbon emissions in the cement industry

The company's calcium silicate slag, calcium sulphate slag and other by-products contain trace amounts of lithium, which can effectively enhance the strength of cement as a cement additive, and thus is welcomed by downstream cement manufacturers. The cement industry is a traditional high carbon emission industry. The application of the company's by-products in the cement industry can help the cement industry reduce its carbon emissions. In 2019, the company provided 540,000 tons of by-products to the cement industry, which is equivalent to reducing carbon dioxide emissions by 93,700 tons.<sup>1</sup>

Reduced carbon dioxide emissions

**93,700** tons

<sup>1</sup> The calculations were based on the data from *Conch Cement 2018 Annual Social Responsibility Report*.



• Green Office

The company not only practices green production, but also promotes green office.

The company adopts the OA system, promotes video conference systems and paperless office. It also regulates the use of company vehicles and travel management to ensure efficient office work, reduce energy consumption, paper use and carbon emissions during travel. We recycle waste products and encourage reuse of domestic and office water.

In addition, we conduct energy-saving and water-saving propaganda and education on a regular basis to popularise the concept of low-carbon life.

Response to Climate Change

Climate change is a severe challenge facing the world in the 21st century. As a global leader in the lithium industry and a participant in the new energy industry, the company actively responds to the national strategy of tackling climate change by comprehensively implementing cleaner production, enhancing its ability to respond to climate change and seizing new opportunities for development.

In 2019, the company vigorously raised the level of energy cleanness by comprehensively carrying out coal-to-steam and coal-to-natural gas conversions, which combined with rooftop photovoltaic power generation and self-produced energy storage batteries that optimised the structure of energy use. In addition, the company carried out the construction of a climate change risk identification, assessment and management mechanism to initially identify the development opportunities brought by climate change, as well as the transformation risks and physical risks.

Currently, the global response to climate change is accelerating, new energy and new energy vehicle industries booming, and pro-downstream policies and changes in consumer preferences appearing, all of which have brought important strategic opportunities for the company to grow. Furthermore, the company's main climate risks at this stage include the strengthened responsibility for emissions reporting in the short term, the potential increase in greenhouse gas emission costs in the medium term and the transformation risks such as the low-carbon technology transformation. To cope with the above risks, the company submits the annual greenhouse gas emission audit report to the regulatory authorities as scheduled and has begun to set carbon reduction targets and urge the deployment of low-carbon technologies and processes to reduce greenhouse gas emissions.



Case

Clean energy utilization

The company is zealous in using clean energy. During the year, Ganfeng Battery's photovoltaic power generation was 2.465 million kilowatt-hours, of which 2.414 million kilowatt-hours were self-generated for self-use and 51,000 kilowatt-hours went on grid to reduce carbon dioxide emissions by more than 2,000 tons<sup>5</sup>. At the same time, the company's energy storage lithium battery is used as an accessory for energy storage in solar projects, effectively supporting the construction of solar projects and providing guarantee for the use of renewable energy. In 2019, Ganfeng Battery's energy storage projects discharged 2.218 million kilowatt-hours of electricity, making a positive contribution to carbon dioxide emission reduction and global climate change mitigation.

<sup>5</sup> The calculations were based on *Huawei 2018 Sustainability Report*.

Case

Recycling stations

In 2019, the company set up multiple resource recycling stations in the office area to sort and recycle waste materials, waste paper, metal and other items as a response to the country's calls for saving resources and supporting environmental protection. About 17.4 tons of waste paper is recycled every month, which is equivalent to saving 296 trees from felling.



Conserving The Ecological Environment

The company actively responds to the national call for ecological conservation by strictly abiding by the environmental factors identification form to screen the possible environmental impacts throughout the product life cycle and including the factors that may cause significant impacts into the environmental control point list while specifying the control requirements and monitoring these factors.

Effective use of natural resources is the foundation of the development of mining enterprises. During the development of lithium ore, the company carries out unified planning, overall layout and comprehensive development of spodumene resources within the scope permitted by existing mining licenses. The company uses underground mining to develop the ore deposits during the mining process, implements reclamation management when closing the mines by sowing grass seeds and laying down turf to prevent soil erosion.



More than **5,000** square meters of greening area added in factories in 2019.



More than **1,200** trees planted in plant areas in 2019.

Case

Lithium extraction from green mines

Revolving around the concept of green mine, Ganfeng Lithium strictly controls its disturbance to the mining area and the surrounding ecological environment during the development of mineral resources. This helps to ensure that the mines always co-exist in harmony with the surrounding environment throughout the life cycle, thereby realising sustainable mining. From 2017 to the present, Ganfeng Lithium has continuously carried out tree planting and afforestation to build green mines, planting more than 1,000 willows and pine trees, 500 fruit trees and countless green vegetables to help flood prevention, soil conservation and mountains greening.



Case

Environmental-friendly lithium extraction from salt lake

Minera Exar is a tie-up between Ganfeng Lithium and Lithium Americas Corp (LAC). Its core lithium Salt Lake project — Cauchari-Olaroz — is already under construction where the lithium resource reserves support an annual output of more than 40,000 tons of battery-grade lithium carbonate for 40 years. Lithium extraction from the Salt Lake takes solar energy as the main energy source and consumes very little fossil energy. The processed water used in the project takes the source that does not meet drinking-water standards, thus avoiding the consumption of fresh water. In addition, because of no need for high-temperature roasting and other links, the process effectively reduces carbon dioxide emissions. After commissioning, the Cauchari-Olaroz project is expected to become one of the most environmental-friendly lithium projects in the world.

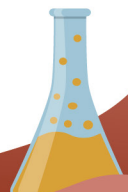




## Consolidating Defence Line and Foundation of Safety



Production safety is the biggest responsibility of an enterprise and the biggest welfare of employees. Ganfeng Lithium gradually establishes and improves the safety production related system, comprehensively implements the safety production standardization management, strictly implements the safety production responsibility, and realizes the goal of zero safety accidents, zero damage to employee's health, and zero environmental accidents.





## Improving The Safety System



In accordance with the *Law of the People's Republic of China on Work Safety*, work safety management regulations of Jiangxi Province and interim measures for the supervision and administration of "three simultaneities" for safety facilities of construction projects, the company formulated its work safety management measures, which has been roundly reformulated and completed within 2019.

Management regulations have been formulated in detail directing at general safety supervision, specific safety supervision, special operation safety supervision, safety technology, hazardous chemical, safety assessment, occupational injury, occupational health and safety monitoring and so on. The company established a work safety committee, safety organisation network and safety supervision department, by which "one position with double responsibilities" based work safety system can be fully implemented, and thus safety can become true in every link, every position and every employee.

The company continuously progressed its safety normalisation and authentication of occupational health and safety management system, whose organic fusion laid a foundation for the implementation of basic work assessment on safety. Thus, the company could promote its safety management level by finding out and making up management leaks timely.

At end of 2019, Ganfeng Lithium and its many subsidiaries have acquired work safety standardisation certificate of tier three; the company and its seven branches have passed ISO45001 Occupational Health and Safety Management System Certificate and OHSAS18001 Certificate.



## Work Safety Practice

Ganfeng Lithium actively put all safe-guard measures into effect by setting its sights on resolving serious risks, timely eliminating potential safety hazards and effectively preventing accidents. In 2019, the company invested RMB 17.878 million in work safety and accomplished its annual control indexes of work safety, keeping a stable state on work safety.

### • Risk Control

In the process of construction projects, the company positively developed three simultaneities for safety work of construction projects. During the operation, the company carried out hazard identification and assessment work annually, to take dynamic management on hazard.

In 2019, 4,882 hazards were identified and 24 major risk management and control measures were formulated and put into practice with level 4 risk management and control. According to hierarchical management and control requirement on risk, all subsidiaries compiled "one map, one sign and three lists", i.e., the four-color map of level-based risk management, the risk warning sign, as well as the lists of risk management responsibilities, risk management measures and emergency disposal measures.

### • Safety Inspection and Supervision

The company set a long-acting mechanism on safety supervision and risk screening by carrying out regular and unannounced safety inspections and risk screening at plant and corporate levels, along with external inspection.

In 2019, the company has organised 289 inspections and received 109 inspection-related work externally, in which 3,975 risks were screened out. We also keep supervising rectification.

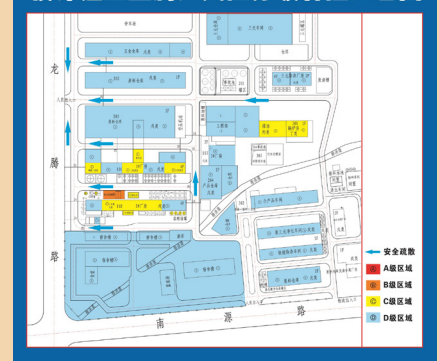
We applied an approval system to special operations relevant to fire, confined space, working at height, hoisting and so on. The company issued 36,368 pieces of special operation tickets in 2019.

### • Safety Emergency Management

In order to promote emergency management level, the company has formulated safety emergency management system. For the identified safety risks, the company compiled a work safety emergency plan and implemented it at the emergency management agency. In 2019, 119 on-site disposal programs were formulated and 195 on-site emergency disposal cards were posted. The company outfitted necessary emergency rescue equipment and developed an emergency exercise, which effectively strengthened employees' safety awareness and emergency disposal skills to help them stay prepared.

In 2019, the safety investment was  
RMB **17.878** million

赣锋锂业直属厂风险分级管控四色图



Four-color map of level-based risk management

Safety rectification

**100%**





• Safety Management on Third Parties

To guarantee the safety of third parties is the obligation undertaken by the company, we integrated the safety risks of third parties into the scope of holistic safety risk evaluation, along with supervising relevant third parties' implementation on safety, environment and health management and thus achieved effective audit.

The company requires that third parties should keep good safety performance with sufficient safety management materials for more than two years and develop a regular review on safety condition of third parties. When we sign a contract with a third party, the work safety agreement for outsourced construction units is also required, accompanied by safe environment announcement for outsourced construction units and safety assessment rules for outsourced construction units, to exert strict management and control.

When entering the company premises, the third parties need to register at safety and environment department, which is responsible for the safety education to constructors. The on-site daily safety patrol of the company contains supervision and inspection on construction safety of third parties. Besides, ceasing of operations, supervision, timely rectification and corresponding penalty are instantly required once potential dangers were spotted.

• Safety Education and Training

In the company's current safety work, it gives great importance to promoting employees' safety education and safety awareness. Employees at all levels have set requirements on safety education, in which technical titles and qualification requirements for full-time safety management staffs are defined. Leaders and safety management staffs are encouraged to achieve more certificates. By the end of 2019, the company had 16 certified safety engineers and 572 special operation staffs working with post certificate. For the major parts as lithium, lithium salt, lithium mineral and so on, the company set an actual plan to improve employees' safety skills.

In 2019, the company has organised 83,926 person-times to take part in safety training. In addition, a series of activities relevant to "work safety month" have been carried out, covering safety knowledge competition, safety open day and unscheduled release of articles in WeChat subscription concerning safety personnel introduction, safety accident warning, safe behavioural habit publicity and so on. These activities create a culture where everyone knows safety, and everyone pays attention to safety.

The number of certified safety engineers

16 persons

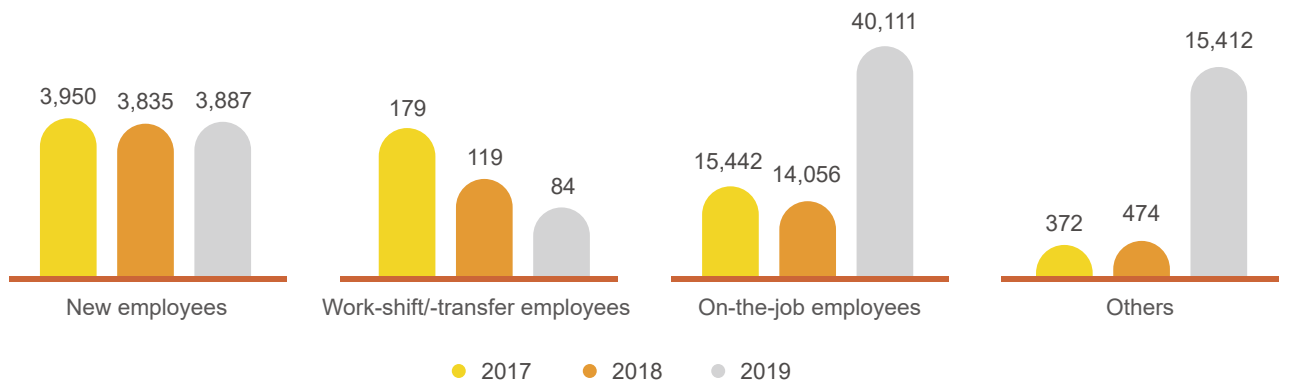
The number of special operation staffs

572 persons

The number of total participated safety training

83,926 person-times

Number of Safety Training Participants in The Company in Recent Three years



Case

Chemical safety online training

In July 2019, the company arranged major leaders of lithium and lithium salt to participate in safety thematic training for Jiangxi chemical (hazard chemical) corporate major leaders" and 7.10 warning education training for Jiangxi corporate major leaders, which were carried out by the Jiangxi emergency management office. They learned 43 correlated online courses concerning chemical safety and thus nourished management chemical safety knowledge.



Case

Work safety knowledge competition

In June 2019, the company launched the work safety knowledge competition activity to stimulate learning through competition and to assist day-to-day compliance to work safety through learning. The content of competition covered work safety, emergency rescue, laws and regulations and so on, which helped assess the employee's overall safety knowledge. Healthy competition made employees to firmly remember work safety concepts and enhance their safety awareness on preventing and solving major risks.



Case

Work safety public open day

On 28<sup>th</sup> June 2019, during the 18<sup>th</sup> national work safety month, the work-safe open day themed risk prevention, potential danger elimination and accident containment was jointly held by the emergency management agency of Xinyu City and Xinyu High-tech Zone along with Ganfeng Lithium. Over 40 people from organisations related to the safety commission of the high-tech zone, surrounding enterprises and local communities stepped into the company together and enjoyed an experiential safety open day activity. During activities, visitors watched corporate publicity video and got to know its work-safe concept and safety behaviour regulations in detail. It offered a direct experience for the audiences on corporate work safety.





# Strengthening Chemicals Management

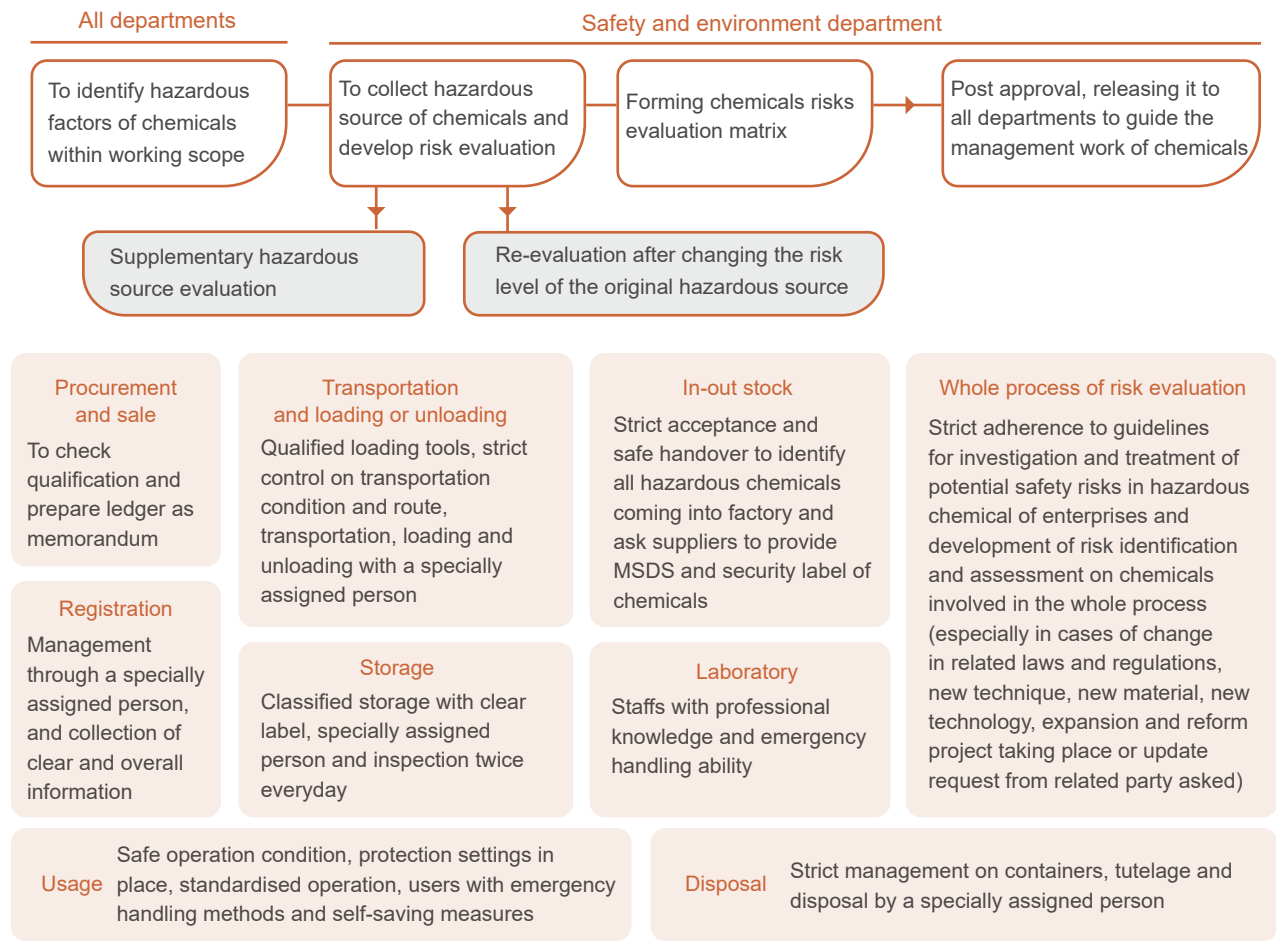
There are certain risks for both human and environment in transportation, loading and unloading, purchase and selling, storage, use and disposal of hazardous chemicals.

The company developed risk assessment on every process involving chemicals. LEC and JHA were respectively adopted according to different objectives and the result was informed to all interested parties so as to strictly prevent the occurrence of major chemical accidents.

The company formulated a series of rules, including laboratory hazardous chemicals safety management, hazardous chemicals storage management, hazard chemicals in-out stock management, hazardous chemicals purchase and selling management, hazardous chemicals transportation management, hazardous chemicals loading and unloading management, hazardous chemicals registration management, hazardous chemicals usage management and hazardous chemicals disposal management, which regulated the management of hazardous chemicals in every segment. Meanwhile, the company followed the procedure of plan, do, check and act to promote its sustainable development. In 2019, there was no personnel safety or environment accident caused by unreasonable handling of hazardous chemicals.



## Flow of Chemicals Risk Evaluation



# Safeguarding Occupational Health

The company closely pays attention to employees' occupational health condition and maintains a safe and reliable working environment for them. We strictly comply with the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases and formulate documents including occupational health and safety monitoring and measurement management and corporate safety and operation management. As for occupational health and safety, the company develops its monitoring and management on related operation and control, environment, safety target, performance and compliance situation of laws and regulations according to the documents. Besides, some operations and activities concerning occupational health and safety risk are regulated as well. The company conveys its employees' occupational health by real practice.



## Occupational Health and Safety Data in 2019





# Jointly Construct- ing and Sharing Development Platforms



The business philosophy of “creating unlimited value through limited resources” is always embodied in the company’ s strategies for talent development. Adhering to the people-oriented approach, the company guides employees to combine personal goals with enterprise development objectives, which aims to maximise employees’ potentials and value, inspire teams’ vitality and competitiveness and realise common growth of the enterprise and employees.





# Upgrading Management System

2019 is “the year of management” for Ganfeng Lithium. In order to support the company’s medium- and long-term strategic objectives, facing the current hurdles and challenges that arise during the phase of rapid development, the Company promotes organisational reform and resource integration to comprehensively improve the specialisation level of both management and technology. The company launched the group management project, in which a “headquarter – division – subsidiary”, i.e., a three-level-structured power and responsibility mode is well adjusted and implemented. Meanwhile, a scientific and efficient management mechanism is formed, which includes appointment methods for thoughtful and innovative managers, seminars and training for management staff — all of which are carried out to reflect on and improve management deficiencies and encourage employees to jointly promote the implementation of the company’s organisational reform. In combination of the company’s strategic objectives and employees’ actual conditions, the company comprehensively optimises performance and salary system to promote result-oriented management by objectives.

Case

## A management seminar—— “Embracing reform and looking to the future”

In May 2019, the company organised a two-day management seminar entitled Embracing reform and looking to the future — an important component of “the year of management”. The content of seminar covers four parts including interpretation of enterprise development strategy, elaboration of corporate entrepreneurship, staff management as well as organisational structure setting and control mechanism. Over 90 senior managers participated in the seminar, which proved to be beneficial for improving managers’ abilities and improving the overall management level of the company.



Case

## Vision 2020 development planning forum

On 6 December 2019, the company held the Vision 2020 development planning forum. The forum welcomed hundreds of attendees, including Li Liangbin, Chairman of the company, Wang Xiaoshen, Deputy Chairman of the company, senior managers, work union representatives and young college students, as well as thousands of online attendees from home and abroad. Focussing on the future development of the company and lithium industry, the forum invited external experts to make professional forecast and organised in-depth discussion, so as to plan ahead with scientific positioning. The company emphasises ESG management and sustainable development strategy, striving to take greater responsibility on the global stage.



# Optimisation of Platform Construction

Pursuing fresh progress under new situation, the company’s competitiveness and development cannot live without a capable and dynamic talent team. The company endeavours to build a career development platform with freedom, equality, fairness and justice, and foster a good working environment for employees’ career growth. These efforts aim to encourage and inspire employees’ diversified development and provide guarantee of talents for achieving the company’s medium- and long-term strategic goals.

## • Performance-based Compensation System Reform

The company takes performance appraisal as a strategic means of promoting efficiency and economic benefit, and a booster to improve employees’ capability and salary. In 2019, in order to match up with the upgrading of management and meet the company’s development requirements at the present stage, the company made further efforts to optimise performance appraisal and salary system. This was aimed to form an incentive mechanism closely associated with the company’s long-term development.

The company advocates dual-channel promotion mechanism which can: Balance technology and management; remain competitive externally and ensure fairness internally; advocate detailed and quantitative evaluation methods; establish scientific and reasonable performance appraisal system and proposes specific evaluation criteria; advocate the matching of ability and salary; refine and improve the salary level setting; provide competitive and differentiated salary; inspire employees to continuously improve their ability. Meanwhile, the company places great importance on the strength and vitality brought by young people. The optimised performance and salary system enable the management team to become younger in average age. Furthermore, the company makes annual appraisal, guides employees to recognise and plan their career paths, so as to maximise the value of talents by putting right people in right positions.



The principle of multi-dimensional evaluation of promotion mechanism

“My previous work is just daily routine, in which important items are difficult to be identified. Now I can clearly see my direction of promotion according to the performance appraisal system.”

“Performance appraisal is an excellent management tool to promote the work of all departments and to ensure people to have a consistent understanding of work objectives and to help achieve higher efficiency.”

“Now I’m clearer about how the company appraises me, the criteria are based on regulations.”

“Performance appraisal criteria also helped me improve management ability, which enables me to assist my team members with career plan.”

Employees’ feedback on improving performance appraisal system



• Enhancing Employee Training

The company has established a high-standard talent training platform and improved incentive mechanism, which is a solid backing and loyal partner of all employees in their course of growth. The company provides platforms of learning and development for employees to assist them improve vocational skills and expertise. Ganfeng Lithium Business School is founded specially for leadership development and all-level manager training. The company also pushes forward the reform of talent development system by which the integration of talents and the enterprise can be accelerated. The company helps employees pursue their career dreams and realise development of employees and the enterprise.

Case

Comprehensive training class for college students in 2019

In July 2019, Ganfeng Lithium Business School carried out a six-day comprehensive training class themed “step forward with lithium, lithium deserves your efforts” for college students. The training provides a variety of sections including meet-and-greet activities, classroom lectures, outward bound, entrance and graduation ceremonies. Fruitful courses including human resource management, workplace code of conduct, career development guidance, application of information technologies in management and safety training are delivered to help new college graduates adapt to the workplace, understand company culture and start a new chapter in their career.



Participants involved in employee training in 2019

94,715

Hours of employee training in 2019

134,194

Training hours per person in 2019

27.7



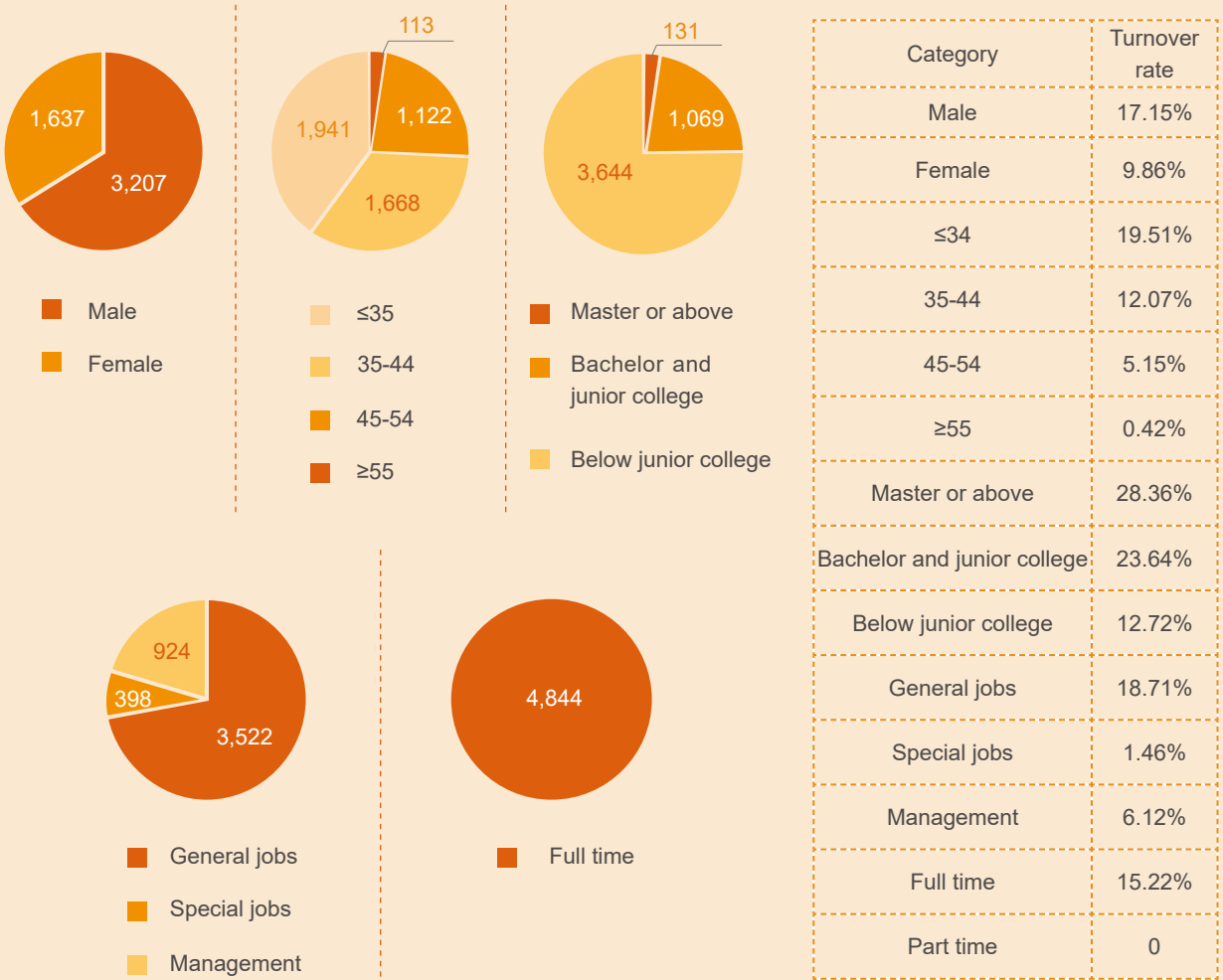
Building A Cohesive Team

Ganfeng Lithium adheres to becoming an enterprise with warmth. The company actively attracts outstanding talents and guarantees employees' personal interests. Compensation and benefits system are improved and caring activities are carried out to promote employees' quality living. This is also a pathway of enhancing the cohesion of the company.

• Talent Recruitment

The company actively broadens channels of talent recruitment and optimises HR structure. The social recruitment of the company is conducted in cooperation with major recruitment websites and headhunting companies, while on-campus recruitment is based on intimate connection with universities. The company also takes the initiative to start enterprise-university collaboration by setting up Ganfeng Lithium class which helps export talents to the company.

Talent composition





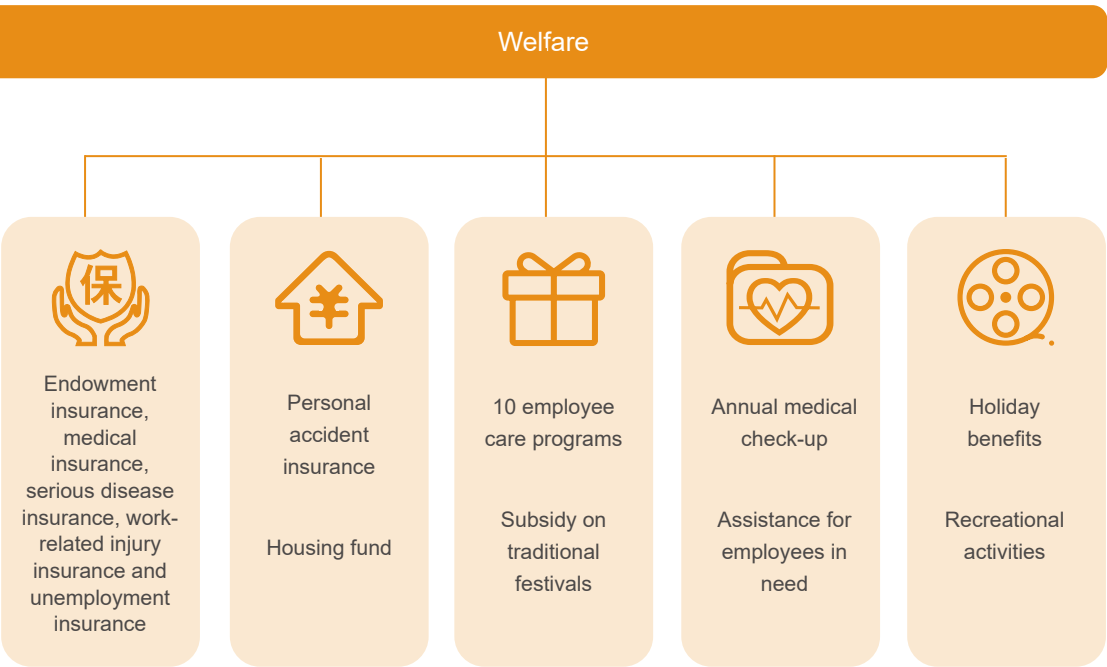
• Protection of Employees’ Rights and Benefits

Based on the *Labour Law of the People's Republic of China*, the *Provisions on Prohibition of Child Labour*, the *Law of the People's Republic of China on the Protection of Minors* and other laws and regulations, the company formulated a series of human resource management systems including the labour and HR management system, provisions on recruitment management, provisions on employees development and training, provisions on compensation and benefits management and provisions on incentive management, etc. These systems and provisions are implemented to standardise the company's labour and personnel management and regulate formal procedures for recruitment, position opening, appointment and removal, transfer and retirement. Competitive compensation and welfare are provided for employees, which help the company to achieve a competitive advantage in the talent market.

The company respects employees' human rights and resolutely resists any violation there of.

In 2019, the company formulated the management system on labour and human rights, which stipulates that:

- Forced employment and labour in which violence, threat or any other means of freedom restriction are applied, are strictly prohibited.
- It is prohibited to use child labour or underage workers. In the case of recruitment by mistake, the child must be sent back to his or her original place of residence with a companion and his/her parents should be required to confirm in writing about the child's non-continuation from workplace.
- The rights and welfare of female workers in special periods should be protected.
- There should be no discrimination against any employee due to ethnic group, race, gender, region or nationality, social class or political affiliation. Equal pay for equal work has to be practiced.
- Insulting, corporal punishment, beating, illegal search or detention of employees are strictly prohibited.
- A complaint handling committee shall be set up, where relevant personnel shall keep secrets. Retaliation against complainant is strictly prohibited.



• Listen to Employees

The company respects employees' opinions and protects their freedom of expression. Every Ganfeng employee is the owner of the company. All major decisions on production and operation, or those involving employees' immediate interests, are publicised through announcement, training or other channels. By this means, the company's major decisions can be executed under the supervision of all employees where their opinions and suggestions can be heard. The company sets up a mechanism for encouraging reasonable suggestions, according to which the best suggestions adopted by the company are awarded in each quarter. The company gives both material bonus and spiritual encouragement to award-winners to stimulate employees' initiative and enthusiasm. In addition, the company carries out an employee satisfaction survey every year to comprehensively understand employees' satisfaction on work development, salary and welfare, working environment, etc.

Suggestions are received in 2019

1,061

Adoption rate of the suggestions is

95.76%

Employee satisfaction reaches

95.42%

• Saluting The Strivers

The development and expansion of Ganfeng Lithium is inseparable from the hard work of every employee. The company organises working skill competition to stimulate employees' enthusiasm and vitality, selects and rewards outstanding employees and model workers, appreciating their commitment to excellence and their dedication to the company. Through the WeChat official account, the company encourages employees' self-improvement and enterprising spirit, salutes and appreciates the practitioners of Ganfeng spirit.



Competition on working skills



Trips of outstanding employees



Pioneer worker team



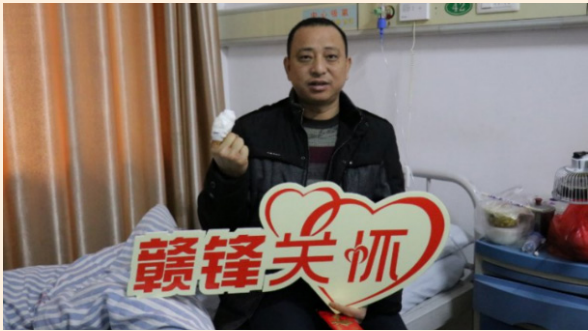
Paying visits to model workers



• Carry The Torch of Ganfeng Culture

The company sets up 10 employee care programs which includes birthday presents, wedding gifts, family planning gift, initial education fund, college education fund, reward for employee's children joining the army, birthday presents for employee's parents, physical exam fee, hospitalisation compassion and funeral consolation. In 2019, the standard for all kinds of subsidies has been further improved.

In addition, the company set up a relief fund to help employees with serious diseases and family difficulties. The company formulated the measures for the management of Ganfeng Lithium employee hardship relief fund to ensure the standardisation of fund management and the fairness in determining objects of relief. As of 2019, the company's relief fund has reached RMB 2,103,500. During the year, the company allocated RMB 1.377 million through the relief fund, helping 72 employees get rid of their difficulties.



Visiting employees who are in need

Case

One-day work in Ganfeng Lithium — career experience activities for employees' children

In the summer vacation of 2019, the company organised one-day work in Ganfeng Lithium — career experience activities for employees' children. The activity sets up positions for these children. By means of practice and thought, children are guided to understand the value and significance of work and learn to appreciate parents. The activity closed the gap between the company and employees as well as their families.



• Enriching Employees' Spare Time

The company advocates a balance of work and life, cares for employees' physical and mental health, actively helps female employees balance family and work, organises a series of cultural and sports activities to promote employees' communication and creates a pleasant working atmosphere to enhance the sense of happiness and belonging of every employee.



Employee sports meeting



Celebration of the national day



Employee activities



Activities on international women's day





# Harmony First and Building A Wonderful Home

The company actively takes social responsibility, strives to be a good enterprise citizen, and endeavours to realise the common progress of the enterprise and the society. The company is prepared to integrate all resources and strength to contribute to the social stability and development in time of social crisis.





# Dedication to the Society with Love

Walking on the way forward, we never forget to give back to the society and actively take social responsibilities. In 2019, the company encouraged its employees to participate in volunteer services in our city, provided assistance to surrounding impoverished villages and helped poor households improve living condition. We devoted our efforts to student assistance and education activities, including donation of vision correction glasses to registered impoverished students, financial support to the establishment of village music classroom and participation in the educational assistance program held by Municipal Association of Industry and Commerce for over 10 consecutive years. In 2019, the company provided 247 job positions for targeted poverty alleviation and paid a total of more than RMB 20 million in wages. The annual total donation of external assistance reached RMB 2.373 million.

Case

## Poverty alleviation and assistance to the poor

The company constantly delivers rice, oil and other daily supplies to the households in impoverished villages and actively buys agricultural by-products from poor households to help relief their sales difficulties. Employees visit the left-behind elderly in nursing home and give out poverty-relief materials. The company also puts forward various assistance measures including alleviating poverty by providing jobs which aims to encourage poor villagers to face life optimistically.



Case

## Love warms children

In 2019, the company provided free eye care service and donated vision correction glasses to the city's registered impoverished students. On the International Women's Day, female employee representatives came to Xinyu Youth League and donated money for the "Action for Brightness" initiative.

On International Women's Day, the company representatives paid a visit to Children's Welfare House in Yushui District, Xinyu. They played games and balloons and maid dumplings, marshmallow and tarts with children there. Representatives also prepared milk and toys as gifts for kids in the welfare house and wished them health and vigorous growth.



Case

## Caring for the traffic police working on hot days

On 2<sup>nd</sup> July 2019, the company organized a visit to the traffic duty station in Hi-tech District, Xinyu, sending greetings to traffic police officers who hold fast to their position under the scorching sun. Employees also brought mung bean and crystal sugar for the officers, not only as summer-cooling supplies, but as a representation of our appreciation for their hard work.



Case

## Voluntary blood donation

On 18<sup>th</sup> April 2019, a blood donation bus of Xinyu Central Blood Station came to Ganfeng Lithium. Employees were attracted to actively participate in voluntary blood donation, expecting to help patients extend precious life by making humble efforts. A total of 60 people participated in the voluntary blood donation and 17,500ml of blood was donated.





# Fighting Together against The Epidemic

At the beginning of 2020, a sudden outbreak of COVID-19 has brought about worldwide ramifications. The epidemic raised the concern of millions of Chinese people as well as the international community. In order to help the whole society to pass through the difficult period and ensure the health and safety of employees, the company urgently set up a working group on epidemic prevention and control, dispatching resources to make contributions to the epidemic-stricken area. The company worked together with people from all walks of life to fight against the epidemic.

Case

## Supporting epidemic prevention by procurement of materials abroad

In view of the shortage of epidemic prevention materials in China, the company set its sight on the overseas market and made emergency contacts with protection suppliers in Argentina, South Korea, Iran and many other places, and finally purchased 64,900 pairs of N95 masks, 10,000 pairs of N100 masks and 15,000 sets of protective clothing from Argentina. After overcoming various difficulties, the company sent the materials back to China and donated them to Jiangxi Red Cross.



Many littles make a mickle. Gathering all the love and strength of the whole society, we believe that we will eventually overcome the epidemic and embrace a blooming spring!

Case

## Use of a by-product to replenish sterilisation supplies

Sodium hypochlorite, a by-product of the company, is the major composition of 84 disinfectants. Taking the advantage in production, the company urgently donated more than 200 tons of disinfectant to Wuhan, Zhengzhou, Xinyu, Yichun and other cities. The donation aims to support the epidemic prevention and control by local government, medical organisations and communities. The company continuously provides disinfectants to surrounding enterprises at a fair price and actively helps them replenish sterilisation supplies to ensure the health and safety of employees.



Case

## Guaranteeing material supply for returning to work

In 2019, Ganfeng Electronics, a subsidiary of Ganfeng Lithium, as one of the listed national key enterprises for epidemic prevention and control, ensured the regular supply of important materials during the COVID-19 outbreak. Ganfeng Electronics is the battery supplier of hand-held thermometers. In order to guarantee the battery supply of hand-held thermometers during the epidemic period, Xinyu Ganfeng Electronics reopened on 17<sup>th</sup> February 2020. By further planning the production expansion of hand-held thermometer batteries, the company aims to solve the problem of supply shortage for more epidemic prevention equipment manufacturers.



Case

## Protection of employee health

The company has been paying high attention to the epidemic trend and urgently set up a leading group for epidemic prevention and control, which supervises the epidemic prevention plan rehearsal, urges the implementation of epidemic prevention measures and organises employees to return to work in an orderly manner. The company strengthens the management of employees' health monitoring in the factory, provides them with all kinds of prevention and control materials and strictly sterilizes manufacturing sites and employee offices. The company constantly sends epidemic prevention notices and greetings to employees and pays close attention to their health condition. The company treats every employee as a family member and always puts their safety and health in the first place, making efforts to provide a safe and comfortable working environment.





## Key Performance of Sustainable Development

Type	Indicator		Unit	2019	2018
Environment					
Exhaust gas emissions	Particulates		Ton	60.51	46.26
	Sulphur dioxide		Ton	81.17	82.60
	Nitric oxides		Ton	256.49	183.78
Wastewater	COD		Ton	34.53	13.52
	Ammonia nitrogen		Ton	0.76	0.80
Solid waste	Hazardous waste		Ton	406.75	44.40
	Non-hazardous waste		Ton	5.50	5.00
Energy consumption	Total energy consumption		Tons of standard coal	185,180	115,084
	Energy consumption per unit of product	Lithium chemical sector	Tons of standard coal or tons of LCE	2.28	2.30
		Lithium battery sector	Tons of standard coal or MWH	10.56	11.32
	Coal		Ton	129,681	124,164
	Power		10,000 KWH	37,880.01	27,730.84
	Diesel		Ton	468.48	376.52
	Natural gas		10,000 m3	521.71	102.8
	Gasoline		Ton	15.50	9
	Use of water in total		10,000 m3	342.17	224.86
Water consumption	Water consumption per unit of product	Lithium chemical sector	Tons or ton of LCE	40.72	41.01
		Lithium battery sector	Tons per MWH	20.44	21.27
Packaging materials	Use of plastic		Ton	3.13	7.31
Greenhouse gas emissions	Scope 1		Ton	-	264,496.73
	Scope 2		Ton	-	61,327.67
Social					
Number of employees	Total employees		Person	4,844	4,597
	Male		Person	3,207	3,233
	Female		Person	1,637	1,364
	≤34		Person	1,941	1,769
	35-44		Person	1,668	1,615
	45-54		Person	1,122	1,108
	≥55		Person	113	105
	Master or above		Person	131	113
	Bachelor and junior college		Person	1,069	1,200
	Below junior college		Person	3,644	3,284
	General jobs		Person	3,522	3,323
	Special jobs		Person	398	906
	Management		Person	924	368
	Fulltime		Person	4,844	4,597
	Part time		Person	0	0

Type	Indicator	Unit	2019	2018
Number of employees	Turnover rate	%	15.22	-
	Male	%	17.15	-
	Female	%	9.86	-
	≤34	%	19.51	-
	35-44	%	12.07	-
	45-54	%	5.15	-
	≥55	%	0.42	-
	Master or above	%	28.36	-
	Bachelor and junior college	%	23.64	-
	Below junior college	%	12.72	-
	General jobs	%	18.71	-
	Special jobs	%	1.46	-
	Management	%	6.12	-
Occupational health	Deaths from work	Person	0	0
	Serious injuries per thousand of employees	%	0	0
Employee training	Percentage of trained employees	%	100	100
	Training hours per person	Hour	29.68	27.11
Supplier	Number of domestic suppliers	/	2,585	2,391
	Number of international suppliers	/	6	49
Product liability	Proportion of product recalls due to safety and health reasons	%	0	0
	Customer satisfaction	Points	93.04	92.88
Anti-corruption	Number of corruption lawsuits	Case	0	0
Community investment	External assistance and donations	RMB 10,000	237.3	82

### Data-gathering used

1. The company hires third-party agencies to conduct greenhouse gas emissions accounting every year. The reported carbon emissions only refer to carbon dioxide emissions and do not include such types of greenhouse gases as methane and nitrous oxide emitted by other emission sources. The calculations were made in accordance with the Guidelines for the Calculation and Reporting of Greenhouse Gas Emissions of Chinese Chemical Production Enterprises (Trial) and the emission factors, of which the emission factor of purchased electricity took the average carbon dioxide emission factor of Central China Grid from the 2012 version of the Baseline Emission Factors of Regional Power Grids in China. By the release of this report, the third-party verified data on greenhouse gas emissions in 2019 has not been obtained and will be disclosed on the company's official website, when available.

2. In 2019, the company's production capacity further expanded. At the same time, as Ganfeng Recycling officially started operating in August 2018, the company's partial energy consumption, water consumption, waste and emissions were higher than in 2018 (Ganfeng Recycling generated 331.76 tons of hazardous waste of lithium slag in 2019). We paid close attention to the data on the environmental impact per unit of product in various segments and found that the overall energy consumption and water consumption per unit of product in major segments decreased.

3. Because of the difficulty in unifying the unit of product in different sectors, such environmental data as overall emissions per unit of product are not disclosed.



## Disclosures and KPIs Compliance with HKEX ESG Reporting Guide

Environmental, Social and Governance Reporting KPIs		Page
<b>Environment</b>		
<b>A1 : Emissions</b>		
General Disclosure		P45-49
A1.1	The types of emissions and respective emissions data.	P47-48, P79
A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P79
A1.3	Total hazardous waste produced (in ton) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P79
A1.4	Total non-hazardous waste produced (in ton) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P79
A1.5	Description of measures to mitigate emissions and results achieved.	P47-48
A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	P49,P51-52
<b>Aspect A2: Use of Resources</b>		
General Disclosure		P45-47,P50
A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	P79
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P79
A2.3	Description of energy use efficiency initiatives and results achieved.	P50
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	P51
A2.5	Total packaging material used for finished products (in ton) and, if applicable, with reference to per unit produced.	P79
<b>Aspect A3: The Environment and Natural Resources</b>		
General Disclosure		P54
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P54
<b>social</b>		
<b>Employment and Labour standards</b>		
<b>B1: Employment</b>		
General Disclosure		P69
B1.1	Total workforce by gender, employment type, age group and geographical region.	P68
B1.2	Employee turnover rate by gender, age group and geographical region.	P68

<b>B2: Health and Safety</b>		
General Disclosure		P62
B2.1	Number and rate of work-related fatalities.	P62
B2.2	Lost days due to work injury.	P62
B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	P62
<b>B3: Development and Training</b>		
General Disclosure		P67
B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P67
B3.2	The average training hours completed per employee by gender and employee category.	P67
<b>B4: Labour Standards</b>		
General Disclosure		P69
B4.1	Description of measures to review employment practices to avoid child and forced labor.	P69
B4.2	Description of steps taken to eliminate such practices when discovered.	P69
<b>Operating Practices</b>		
<b>B5: Supply Chain Management</b>		
General Disclosure		P40-41
B5.1	Number of suppliers by geographical region.	P40
B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	P40
<b>B6: Product Responsibility</b>		
General Disclosure		P42
B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P42
B6.2	Number of products and service related complaints received and how they are dealt with.	P42
B6.3	Description of practices relating to observing and protecting intellectual property rights.	P32
B6.4	Description of quality assurance process and recall procedures.	P42
B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Do not apply
<b>B7: Anticorruption</b>		
General Disclosure		P25
B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P79
B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P25
<b>community</b>		
<b>B8: Community Investment</b>		
General Disclosure		P75
B8.1	Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	P75-78
B8.2	Resources contributed (e.g. money or time) to the focus area.	P75-78



## Feedback form

Dear readers,

Thank you for reading the *Sustainable Development Report of Ganfeng Lithium in 2019*. We sincerely hope to get your comments and suggestions regarding this report and our work as well. Please send the filled feedback form to us via mail, email after scanning or fax, or call your valuable advice directly. Really appreciate it.

Address: Longteng Road, Economic Development District, Xinyu City, Jiangxi Province

Email: liaolonglong@ganfenglithium.com

1. Which of the following stakeholder do you belong to?

- ☐ Shareholder   ☐ Employee   ☐ Supplier   ☐ Customer   ☐ Government   ☐ Supervising regulator   ☐ Community  
☐ Other (please specify)

2. Have you read the Social Responsibility report of Ganfeng Lithium? (If no, please ignore No.3, 4, and 5)

- ☐ Yes   ☐ No

3. If yes, do you read a paper version or an electronic version?

- ☐ Paper version   ☐ Electronic version

4. Do you wish to read a paper version or an electronic version?

- ☐ Paper version   ☐ Electronic version

5. What is your overall evaluation for the report?

·Readability (i.e. intelligible expression, beautiful design, attractive content, and easy to find the required information)

- ☐ 3 (good)   ☐ 2 (general)   ☐ 1 (poor)

·Reliability (The information in this report is true and reliable)

- ☐ 3 (good)   ☐ 2 (general)   ☐ 1 (poor)

·Completeness The report should reflect positive and negative information, and meeting your needs in information.

- ☐ 3 (good)   ☐ 2 (general)   ☐ 1 (poor)

In addition to the contents that have been disclosed, what kind of information do you wish to read?



## A Shared Journey with Lithium



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