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Xinjiang Goldwind Science & Technology Co., Ltd. Sustainability Report 2020



**Innovating for a Brighter Tomorrow**

**Xinjiang Goldwind Science & Technology Co.,Ltd.**

No. 107 Shanghai Road, Economic & Technological Development District, Urumqi, Xinjiang

Tel: +86-(0)991- 3767402 Fax: +86-(0)991- 3762039

Post code: 830026

**Beijing Goldwind Science & Creation Windpower Equipment Co.,Ltd.**

No. 19 Kang Ding Street, Economic & Technological Development Zone, Beijing (first- phase project)

Tel: +86-(0)10-87857500 Fax: +86-(0)10-87857529

No. 8 Bo Xing 1st Road, Economic & Technological Development Zone, Beijing (second-phase project)

Tel: +86-(0)10-67511888 Fax: +86-(0)10-67511983

Post code: 100176

# 2020

## SUSTAINABILITY REPORT

# About the Report

## ⌚ Scope

This report discloses information about the commitment to sustainable development and social responsibility carried out by Xinjiang Goldwind Science & Technology Co., Ltd. (hereafter referred to as “Goldwind” or “the Company”) and its subsidiaries.

## 📅 Reporting Frequency

This report is an annual report covering the period from January 1, 2020 to December 31, 2020. Some of the content goes beyond the scope listed above.

The sustainability report of the previous year was issued on March 31, 2020.

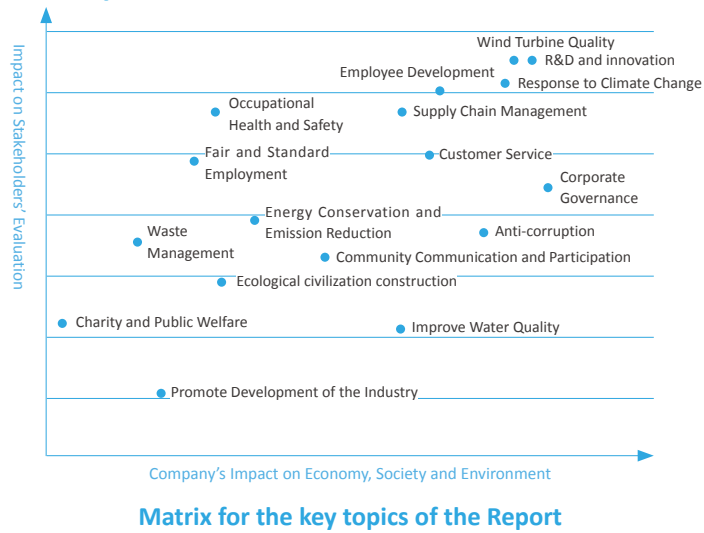
## 📖 Reporting Reference

The report was compiled basing on Hong Kong Stock Exchange's *Environmental, Social and Governance Reporting Guide*, Shenzhen Stock Exchange's *Social Responsibility Guidelines for Listed Companies*. It also draws extensive reference from the Global Sustainability Standards Board's *Sustainability Reporting Guidelines*, the United Nations' *2020 Agenda for Sustainable Development*, International Organization for Standardization *ISO 26000: 2010 Guidance on social responsibility*, Standardization Administration of P.R.C's *Guidance on Social Responsibility Reporting*, and other related documents.

## 📄 Identification Process of Key Topics of the Report

Based on the business scope, expectations of internal and external stakeholders, and global sustainable development, with reference to domestic and international CSR standards, guidelines, initiatives, and regulations related to the development of the wind power industry , the Company identified a total of 40 issues concerning the economic, social, and environmental impacts of the Company, which can influence the evaluation of the Company by stakeholders. After being reviewed by the Company's Management and evaluated by stakeholders, the key topics to be disclosed in the Sustainability Report have been confirmed and are detailed throughout this report.

In December 2020, the Company issued to stakeholders questionnaires on key topics of the sustainability report, aiming to collect issues of concern and relevant suggestions from investors, customers, employees, and suppliers on the sustainable development of the Company. A total 147 verified questionnaires were collected from 100 percent of surveyed stakeholders.



## 🗣️ Data Specification

All financial data disclosed in the report is obtained from the Company's *Annual Report*, while other data is obtained from the Company's official documents and related statistics. Unless indicated otherwise, any financial data in the report is expressed in RMB.

## 🚩 Reporting Commitment

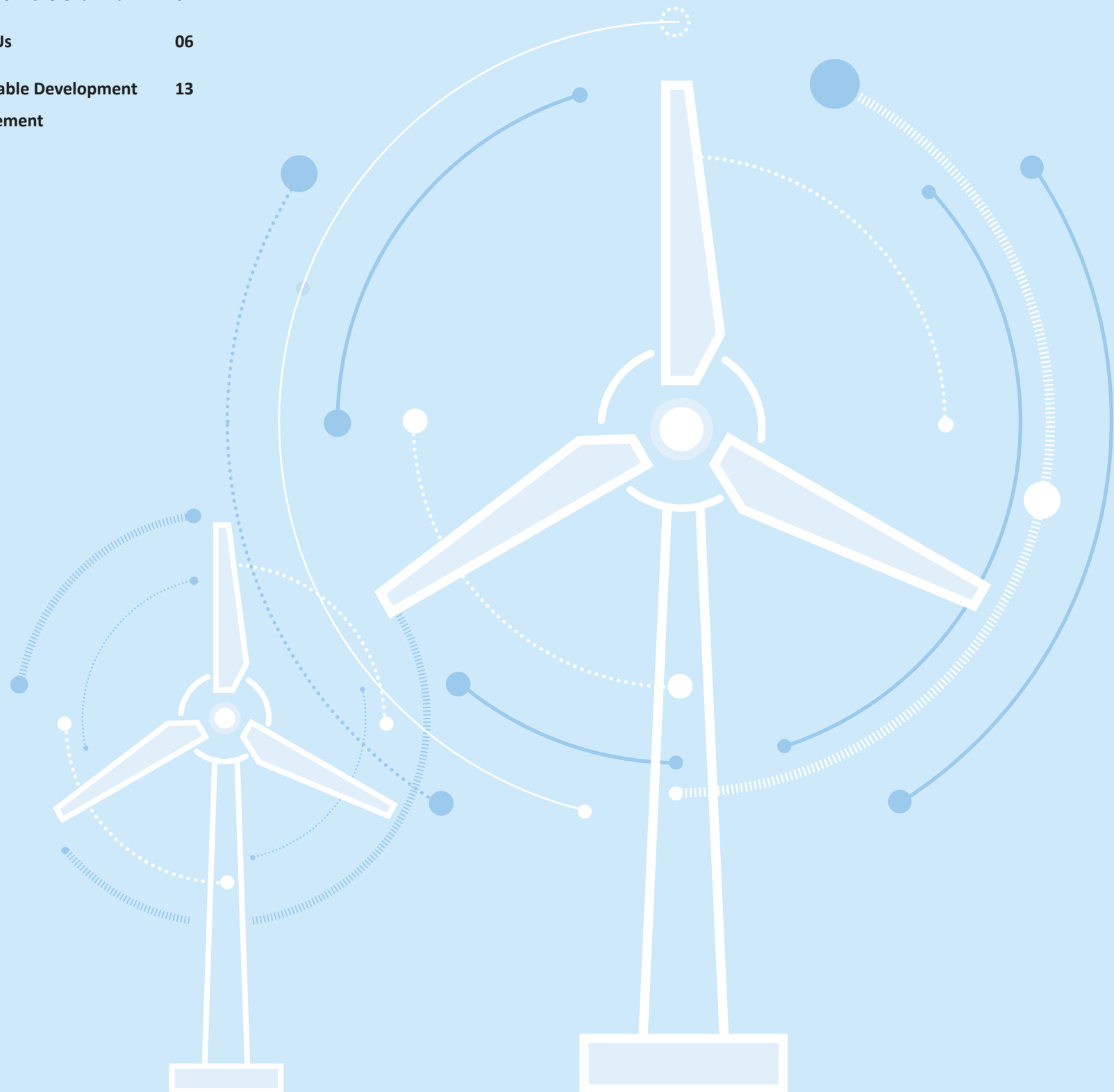
This Report was examined and approved by Goldwind’s Board of Directors who guaranteed that the reported contents do not contain any false information or misleading statements.

## 📍 Report Availability

This Report is available in both Chinese and English. Should there be any inconsistency between the two versions, the Chinese version shall prevail. The report is published in both printed and electronic formats. To view this report, please visit Goldwind’s website at [www.goldwind.com.cn](http://www.goldwind.com.cn), or visit [www.cninfo.com.cn](http://www.cninfo.com.cn), and Hong Kong Stock Exchange’s website at [www.hkexnews.hk](http://www.hkexnews.hk).

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## Letter from the Chairman

In 2020, the world experienced an unprecedented global pandemic that sickened hundreds of millions of people all over the global. As the COVID-19 pandemic swept the world, the serious economic and social impacts were equally widespread, and yet, the future of mankind worldwide became more closely connected. The stagnate global economy caused by the pandemic reminds us that long-term and stable economic development should be based on the harmonious coexistence of economy, society, and the environment. The same holds true for business sustainability and long-term development. The connection between an enterprise's growth and the promotion of social and environmental leadership are integral to the long-term sustainability of a corporation of our corporation, Goldwind.

The United Nations issued 17 Sustainable Development Objectives in 2015 that call on all countries to jointly tackle climate change and other serious challenges facing the world. As a world-leading wind turbine R&D and manufacturing enterprise, Goldwind has been playing an active role in tackling climate change and other issues. Goldwind continues to provide stable and reliable wind turbines to nearly 30 countries around the world, securing steady supplies of green power, and creating a low-carbon and environmentally friendly future.

In 2020, under the dual test of prevention and control of the COVID-19 pandemic as well as meeting the huge market demand for wind turbines, the Company strictly implemented the pandemic prevention and control measures, and coordinated with the industrial chain resources to safely resume production. As a result, Goldwind and its employees and stakeholders successfully installed 13.06 gigawatts (GW) of capacity, more than 73 GW wind turbine units in 2020 with an annual energy production 146 billion kilowatt-hours (kWh). This equates to a carbon dioxide emission reduction of 122 million tons CO<sub>2</sub>e per year when compared with coal-fired electricity.

In September 2020, President Xi made a public commitment that China will aim to peak its carbon dioxide emissions before 2030

and achieve carbon neutrality before 2060, demonstrating China's firm determination to combat climate change. The Company took the lead in carrying out a Life Cycle Assessment in the wind power industry and invited a third party to conduct a Life Cycle Assessment on the environmental impact for the GW155-4.5 MW and GW136-4.2 MW, two permanent magnet direct-drive wind turbines, based on ISO 14040/ISO 14044 and other internationally accepted standards. According to the assessment, carbon dioxide emission per unit of energy production in the whole life cycle is only 7.25 g and 8.04 g, less than 1% of that of coal-fired electricity, which once again confirms the advantages of wind power in low carbon emission. Based on the years of experience in energy conservation and emission reduction management in at the Goldwind Beijing Yizhuang Smart Park, the Company further verified the total amount of greenhouse gas emissions of the park in 2020 and purchased China Certified Emission Reduction (CCER) to offset all the greenhouse gas emissions from the park. The park has been evaluated and certified by Beijing Green Exchange as the first carbon neutral demonstration park in China.

The Company is committed to comprehensively improving the performance and intelligence level of wind turbines through innovation to improve energy production efficiency, reduce the Levelized Cost of Energy (LCoE), and enhance the competitiveness of the wind power in global markets. In 2020, the Company invested RMB 2.27 billion in R&D and innovation. Many achievements have been made by upgrading the Innovative Product Design (IPD) R&D management system and improving the efficiency of wind turbine development. Among them, the GP21 product series, the third generation permanent magnet direct-drive platform, can lower the wind speed for development to 5 meters-per-second, effectively utilizing the wind resources with low grade of the wind power density, and significantly improving the energy production performance. Based on the integration of digital models, advanced algorithms, and intelligent sensing technologies, the platform of wind turbine intelligent control system "WindMaster" has been launched to help the wind turbine effectively deal with the faults caused by its



*Only in hard times can courage and perseverance be manifested, and unswerving practices are all the more precious. When stepping into the new era after going through the challenge of the pandemic, Goldwind will especially cherish the sacred mission of Innovating for a Brighter Tomorrow. The Company shall always be in awe of the environment and how we, as a company, can create equitable, sustainable and lasting change to protect it. Goldwind takes this responsibility seriously and is committed to working in all its global markets with its customers to bring best-in-class products and excellent business and operational performance to the renewable energy industry.*



abnormal state or external emergencies. The platform can also adapt to complex and volatile operating environments such as extreme cold or heat, and thunderstorms.

Base on the Company's entrepreneurial experience, the corporate culture of "integrity, endeavor, perseverance" has come into being with the integration of the essence of Chinese traditional culture and the globalization concepts. The Company attaches great importance to long-term development, actively transforming from a community of shared interests into a community of shared future. While adhering to the business development that is conducive to the environment and society, the Company actively manages the impacts of business decisions and operations on the environment and society through responsible operations, striving to maximize the comprehensive benefits of stakeholders such as shareholders, customers, employees, suppliers, and residents around the wind farm.

The Company adheres to transparent and regulated operation, strives to reward investors with excellent business performance, and shares the development achievements of the Company with investors. In the process of manufacturing wind turbines, the Company continues to optimize the quality of wind turbines, improve the efficiency of resource utilization, and promote energy conservation and emission reduction. As the Green Supply Chain Project has been implemented to help suppliers optimize and improve their environmental performance, over 100 suppliers have engaged in the green action to build a sustainable wind power industry chain. The Company also provides employees with equal, healthy, and safe work environment, aiming to create an excellent growth platform to facilitate professional development. Responsible procurement has been carried out to protect the legitimate rights and interests of suppliers, so as to achieve mutually beneficial cooperation. The Company is committed to giving back to the society and supporting the development of local communities where we operated through efforts in poverty alleviation and assistance in the development of education, environmental protection and public health, culture and sports.

The Company positions its own development in the framework of global sustainable development, staying motivated and actively seeking for change. It is determined to fulfill enterprise social responsibility and aligns its own development with the United Nations Sustainable Development Goals based on its business characteristics, as well as accumulated business advantages and resources. The Company has translated goals closely related to the Company's business operation into specific and executable actions of sustainable development, contributing to the solving of environmental and social problems.

Only in hard times can courage and perseverance be manifested, and unswerving practices are all the more precious. When stepping into the new era after going through the challenge of the pandemic, Goldwind will especially cherish the sacred mission of Innovating for a Brighter Tomorrow. The Company shall always be in awe of the environment and how we, as a company, can create equitable, sustainable and lasting change to protect it. Goldwind takes this responsibility seriously and is committed to working in all its global markets with its customers to bring best-in-class products and excellent business and operational performance to the renewable energy industry.

We hope that stakeholders will follow and support the development of Goldwind and work with us to further sustainable development and drive our renewable future.

Wu Gang  
Chairman of Goldwind



# About Us

## >> Company Profile

Xinjiang Goldwind Science & Technology Co., Ltd. was founded in Urumqi, Xinjiang, China in 1998, and was restructured into a limited company in 2001. The Company was listed in Shenzhen Stock Exchange (SZSE: 002202) in December 2007, and was listed in Hong Kong Stock Exchange (HKEx: 02208) in October 2010.

We are mainly engaged in the development and manufacture of wind power equipment, wind power related services, wind farm investment and development, water services, and other businesses. In addition to high-quality wind turbines, we also provide wind power related services and wind farm development solutions. With our extensive experience in manufacturing wind turbines and building wind farms, we can meet the needs of all customers well throughout the whole wind power value chain. While better serving our clients in wind power field, we are now expanding our businesses to other renewable energy and environmental protection businesses. We are committed to becoming a global leader to provide clean energy, energy conservation, and environmental protection solutions.

Our wind turbine products are equipped with the Permanent Magnet Direct Drive ("PMDD") technology. And in order to adapt to the rapid market growth and meet a wide range of client needs, we have been improving and refining our product portfolio. Now we have a series of 1.5 MW, 2 S, 3 S / 4 S, 6 S / 8 S PMDD WTGs that are adaptable to various operating environments, such as high and low temperature, high altitude, low wind speed, and coastal area. As of the end of 2020, the Company was ranked No.2 in global market, with newly installed capacity of 13.06 GW, of which 12.33 GW was newly installed in China .We achieved a domestic market share of 21% and was ranked No.1 in Chinese market for 10 consecutive years<sup>1</sup>.

Note <sup>1</sup>: Bata from 2020 Global Wind Turbine Market Shares Report released by Bloomberg New Energy Finance (BNEF)



» Our Businesses

Goldwind is committed to providing economical, reliable and sustainable green power to thousands of households. Over the past 20 years, based on its advanced wind power technology and products, as well as the advantages of wind farm development, construction, as well as operation and maintenance experience, the company's wind turbines have been sold to more than 20 countries in 6 continents, thus continuously providing green power for local residents. Bearing in mind the original mission of contributing to human society, the company engages itself in water treatment. Upholding consistently steady corporate governance and innovation-driven development, Goldwind produces water treatment technologies and solutions that have been widely recognized by the market.



Countries where projects are located

China, Argentina, Australia, Belarus, Bolivia, Canada, Chile, Cuba, Cyprus, Ecuador, Egypt, Ethiopia, France, Germany, Italy, Kazakhstan, Pakistan, Panama, Poland, Romania, South Africa, Spain, Thailand, Turkey, England, United States, and Uzbekistan



Wind farms in China

Heilongjiang, Jilin, Liaoning, Inner Mongolia, Hebei, Shanxi, Shandong, Henan, Anhui, Jiangsu, Zhejiang, Jiangxi, Hubei, Shaanxi, Ningxia, Sichuan, Guizhou, Guangxi, Yunnan, Tibet, Xinjiang, and Gansu

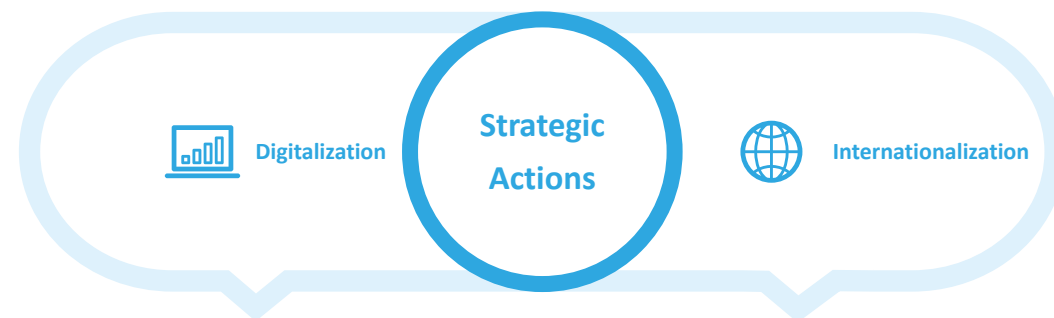


Water treatment plants in China

Shandong, Anhui, Jiangsu, Zhejiang, Hubei, Hunan, Jiangxi, Fujian, Guizhou, Yunnan, Guangxi, Xinjiang, and Shaanxi

## » Our Strategy

As a global leader in developing, manufacturing, and deploying integrated solutions on clean energy, energy conservation, and environmental protection, Goldwind takes its role in helping to combat the effects of climate change seriously. Through Goldwind's mission, Innovating for a Brighter Tomorrow, and corporate adherence to China's 14th Five-Year Plan period, Goldwind strategically pursues quality, innovation, collaboration, talent, and growth. Further, the Company applies the development concept of a pursuit of a better life through quality sustainable development; client-oriented, strategy- and efficiency-driven development; and organizational vitality and risk prevention. All of which place a heavy focus on the digitalization, internationalization, and sustainable development of each business unit, which in turn, elevates Goldwind as a respected high-tech global enterprise of sustainable development.



Digital transformation plays an important role in the expansion of the Goldwind, and to achieve the digitization of enterprise products, business, and management, Goldwind has developed a team of talented colleagues and exports to build a digitalized platform-based organization. This team will be charged with continuously developing intelligent, smart wind turbines and wind farms, strengthening the digital capabilities of engineering, construction, and service businesses, and expand digitalized capabilities via client-side energy management systems and virtual power plants. This will allow the Company and its customers achieve a fully- integrated digitization strategy covering the whole value chain — business, products, management, organizational efficiency, client experience, and product sales and service.

Goldwind continues to increase sales volume in overseas markets by strengthening the construction of the international supply chain to ensure project profitability and achieve profits from international business units. The Company is also strengthening the global service network to improve client experience, provide value-added services to increase clients' long-term returns, and maintain high gross profit margins for Goldwind's service business. Finally, Goldwind seeks to carry out its project development pipeline and transfer existing projects to new long-term owners and future repeat buyers of Goldwind assets, products, and services.



## » Corporate Culture

The value shared by all Goldwind staff is to "create values for life achievements". Creating values is our unswerving pursuit, and is also the motive power behind our healthy development. And life achievements are the embodiment of both our business development and personal achievements, and are the driving force for sustained and remarkable development.

### Customer-Oriented

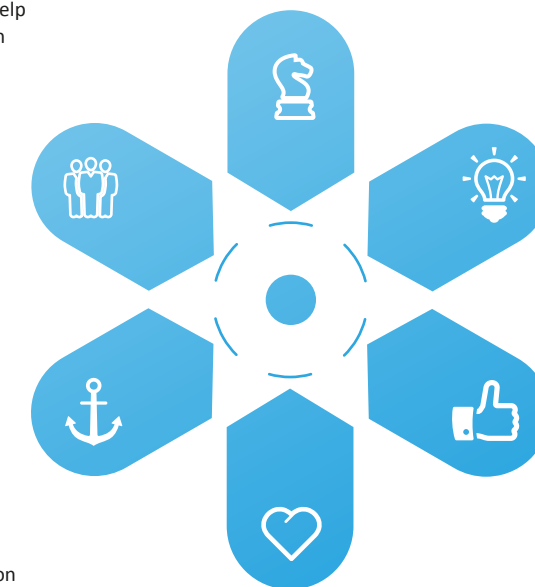
Being customer-oriented is the cornerstone of Goldwind. To serve the customers and employees well is our fundamental philosophy. All Goldwind staff will focus on the market needs and customer concerns, work together with customers, and help customers succeed to realize our own development.

### Pioneering Mindset

We keep drawing lessons from changes and applying new ideas to practice. We have the courage to think outside the box, to explore and innovate, and to win victories one after another. Finding values and creating values have always been the aspirations of Goldwind.

### Unity of Knowledge and Action

Actions start with knowledge, and actions also produce real knowledge. We are against the practice of too much talking but little doing. Knowledge needs to be verified and improved through actions. We encourage our staff to promptly transform their creative ideas into actions to produce results, and then verify and improve them through more practices and actions, thus to create values.



### Openness & Collaboration

We should be modest, kindhearted, energetic, and open-minded to draw on the advantages from those surrounding us. We urge our employees to keep up with the times and learn from the customers, competitors, and leading enterprises.

Only when we put aside the past glory, can we embrace the future. Being open and aspirational is the only way to break limits. We should be aware of the restrictions of our own perception and constantly explore new possibilities for continuous growth. The foundation on which to boost our knowledge is to be modest, be curious, and be kind from the bottom of our heart.

We adhere to the principle of satisfying customers and helping them succeed, and we believe that to help others is to help ourselves.

### Respect and Trust

Respect, first and foremost, is about people. It is our pursuit to make Goldwind people work and live with dignity. We also respect justice and rules. Goldwind opposes absolute obedience to the management or authority, and upholds principles and disciplines.












As an old Chinese saying goes, "Trust is vital to business." Goldwind has made concrete efforts to build a trustworthy working environment where our employees, suppliers, and customers cooperate with integrity.

### Do it right the first time

In order to adapt to the competitive environment of the Internet era and achieve the goal of high-quality development, the Company advocates the culture of "Do it right the first time" to drive rapid business growth with the efficient performance made possible by carrying out list management and reducing the waste of resources. "Do it right the first time" serves as the duty of Goldwind, demonstrating our indomitable ambition, unyielding spirit, the pursuit of excellence, and the commitment to our clients. The practice of "Do it right the first time" is the best representation of the implementation of Goldwind culture.



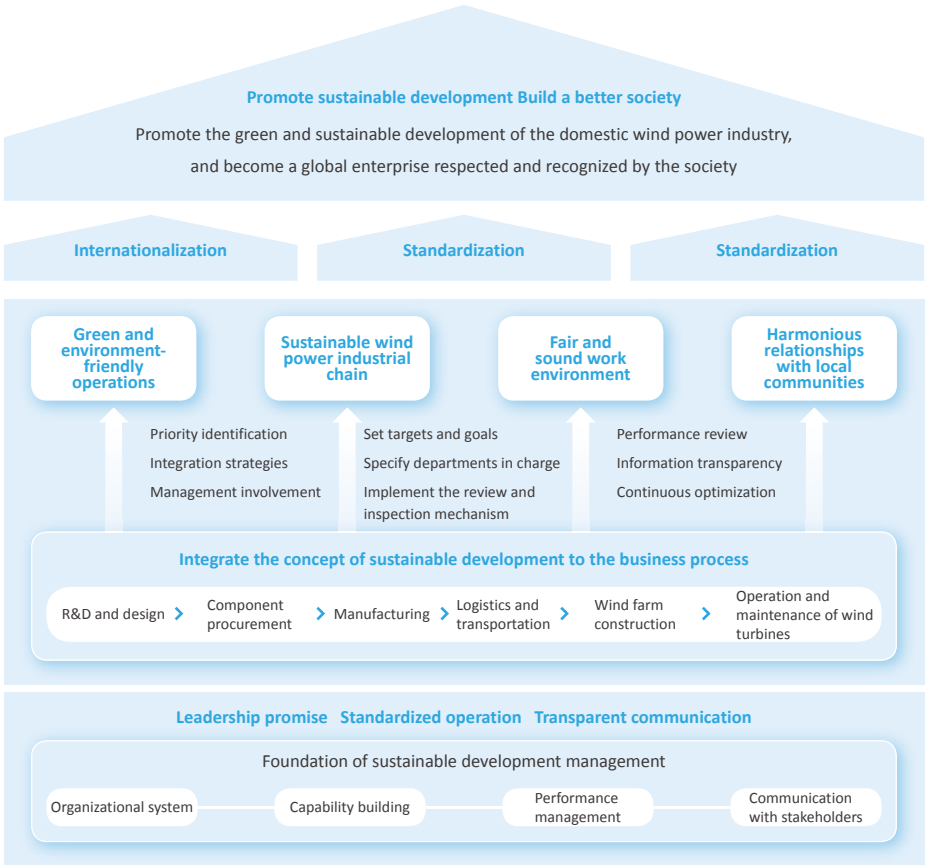
» Major Awards and Honors

Awards and Honors	Awarded by
 Fortune China 500 Company	fortunechina.com and CICC Wealth Management
 Global Top 500 New Energy Enterprises Top 50 New Energy Technology Innovative Enterprises	China Energy News, China Institute of Energy Economics Research
 New Fortune Best Listed Company	New Fortune and Guanghua-Rotman Center for Information and Capital Market Research
 Top 100 Enterprises in China's Machinery Industry	China Machinery Industry Federation (CMIF)
 China ESG Golden Awards for Sustainability Award of the Year	Sina Finance
 Evergreen Award – Sustainable Development Benefit Award	Caijing Magazine, China Alliance of Social Value Investment
 Research Base for High Quality Energy Development of China	Tencent Atom Think Tank, National School of Development at Peking University, Tencent Research Institute
 Best Investor Relations Company	Securities Times
 Global Service Demonstration Case Award	Global Trade in Services Summit of the China International Fair for Trade in Services (CIFTIS)
 China Standard Innovation and Contribution Award	State Administration for Market Regulation
 Most Socially Responsible Investment and Operation Enterprises in Water Industry	www.h2o-china.com, E20 Institute of Environment Industry, E20 Environment Platform

Sustainable Development Management

As a global provider of integrated wind power solutions, Goldwind leverages its expertise to provide products and services related to clean energy infrastructure to help address global resource shortages and mitigate climate change. In the process of decision-making and operation management, the Company optimizes its operation and management with high standards for social responsibility in accordance with international standards, guidelines or initiatives, such as the United Nations *Sustainable Development Goals (SDGs)* and International Organization for Standardization *ISO 26000: Guidelines on Social Responsibilities*. The Company takes into consideration the impacts on employees, clients, suppliers, and communities, in an effort to protect the interests of stakeholders and to facilitate further development. Furthermore, the Company takes strides to identify environmental and social risks to reduce any adverse impact on stakeholders, and to realize the long-term and stable growth of the interests of all parties for the joint sustainable development of Goldwind.

With the goal of "promoting sustainable development and building a better life", the Company integrates the concept of sustainable development into its business process and evaluates the positive or negative, and current or potential impacts of all aspects on the environment and society, in order to control social responsibility risks. By taking into account of the actual operation and management, the Company identifies and determines key priorities in the four fields of green operation, sustainable wind power industry chain, fair and sound work environment, and harmonious community relations. The Company breaks these priorities down into sustainable development projects for implementation within the year so as to gradually improve the Company's management and practice of sustainable development.



Goldwind Sustainable Development Path

## » Sustainable Development Organization System

The Company's sustainable development organization system is composed of the Sustainable Development Management Committee, the Sustainable Development Management Office, and the Sustainable Development Management Project Team. The Company has established the Sustainable Development Management Committee, with Chairman of the Board Wu Gang as the committee director and senior executives of the Company as committee members. These members manage all tasks related to the sustainable development management of the Company. The Sustainable Development Management Committee is mainly responsible for promoting social responsibility and sustainable development as important management concepts and requirements within the Company under the supervision and guidance of the Board of Directors, and integrating relevant issues into the Company's strategy, operation management and business process. The committee also strives to realize cross-functional and interdisciplinary organizational collaboration, gives full play to the Company's experience and resource advantages in the wind power industry, and optimizes the management of the Company's environment, human resources, and social capital, so as to obtain overall improvement of the sustainable development management.

The Sustainable Development Management Office is composed of department directors and professionals related to sustainable development management to provide professional support for various tasks. It is responsible for the implementation of sustainable development management by setting up teams based on each specific project.



Structure of Goldwind sustainable development organization system

In 2020, the Company held three meetings of the Sustainable Development Management Committees to review the 2019 Sustainability Report, annual plan, as well as facilitate the implementation of key tasks within the year. The key issues discussed by the Sustainable Development Management Committee include:

- Annual Sustainability Report;
- Implement the Life Cycle Assessment (LCA) of wind turbines;
- Social responsibility management of supply chain;
- Tasks related to the green supply chain;
- Assessment and response to the risks and opportunities associated with climate change;
- Establish and improve the social responsibility management system.

## » Sustainable Development Training

The Company attaches great importance to improving the awareness of sustainable development of all employees, and comprehensively interprets and promotes corporate social responsibility by relying on the Company's website, official WeChat account, Goldwind University courses, and other media, thus creating a favorable atmosphere for fulfilling social responsibility and achieving sustainable development. The Company also carries out research and communication activities on the integration of corporate social responsibility and sustainable development into operation and management, actively learns from the best practice and successful experience of leading enterprises in sustainable development management, and explores the latest trend of global social responsibility development, so as to provide guidance and reference for the sustainable development management of the Company. In 2020, in view of the new version of *Environmental, Social and Governance Reporting Guide* issued by The Stock Exchange of Hong Kong, the Company carried out internal publicity and training to help employees better understand the regulatory requirements and future development trend related to sustainable development.

## » Sustainable Development Communication

Stakeholders' understanding, recognition, and engagement in Goldwind's social responsibility and sustainable development serve as the basis for the continuous and effective promotion of the relevant work. The Company communicates with stakeholders about its sustainable development efforts. It releases a Corporate Sustainability Report, participates in conferences and forums on sustainable development, engages in external interviews and market research, and involves shareholders in different activities, so as to promote the information about the Company's fulfillment of social responsibility and commitment to sustainable development, thus establishing a good relationship build on mutual trust with the majority of stakeholders.




◆ Ma Jinru, Vice President and Secretary of the Board, delivered a keynote speech at Caijing Sustainable Development Summit




◆ CUEB China ESG Institute visited Goldwind for conducting the research



The Company tracks domestic and international mainstream sustainability development rating, analyzes the rating system, and communicates the Company's performance in environmental, social and governance aspects, thus promoting the improvement of internal sustainable development management. The Company has been included in the MSCI ESG Leader Index, Hang Seng Corporate Sustainability Benchmark Index, Hang Seng A-share Corporate Sustainability Benchmark Index, FTSE4Good Index Series, and CSI Sustainable Development 100 Index for consecutive years.

	Goldwind has been a constituent of MSCI ESG Leaders Index with rising rating since 2018, when MSCI officially included A-shares in the MSCI Emerging Markets Index and All Country World Index (ACWI), and conducted ESG research and rating on A-share companies.		
	Year	2020	2019
	Company Rating	AA	BBB

	In 2019, the Company was included in the FTSE4Good Index Series for the first time, with a score of 2.9.	
	Year	2020
	Company Rating	2.90

	Hong Kong Hang Seng Corporate Sustainability Index reflects the sustainability performance of Hong Kong and mainland Chinese companies listed on Stock Exchange of Hong Kong. Since its inclusion in the index in 2017, the Company has continuously improved its rating, with a rating of AA for 2020.		
	Year	2020	2019
	Company Rating	AA	A+

Communication with stakeholders is an important part of Goldwind's sustainable development management. The Company accurately identifies the stakeholders and communicates with them through meetings, regular visits, and satisfaction surveys to understand their expectations and demands, as well as takes measures to respond and meet reasonable demands based on its own production and business operation.

Stakeholder Communication Form

Stakeholders	Major Concerns or Expectations	Responses
 Shareholders and creditors	<ul style="list-style-type: none"><li>Sustainable profitability</li><li>Regulation of corporate governance</li><li>Disclosure of business information</li><li>Reward shareholders</li><li>Enhance the profitability</li></ul>	<ul style="list-style-type: none"><li>Enhance business management capacity</li><li>Strengthen management of debt risk</li><li>Optimize internal compliance management system</li><li>Timely disclosure of information</li><li>Organize shareholders' meeting</li><li>Reasonable profit return</li></ul>
 Clients	<ul style="list-style-type: none"><li>Honest contract performance and integrity</li><li>High-quality products</li><li>Excellent services</li><li>Responses to client requests</li></ul>	<ul style="list-style-type: none"><li>Strictly implement requirements set forth in contracts</li><li>Strengthen product quality management</li><li>Offer differentiated, high-quality products</li><li>Offer excellent services</li><li>Improve the procedure to handle client complaints</li><li>Protect client privacy</li></ul>
 Employees	<ul style="list-style-type: none"><li>Protection of legal rights and interests</li><li>Salary and welfare guarantee</li><li>Health and safety protection</li><li>Development platform building</li></ul>	<ul style="list-style-type: none"><li>Equal and regulated employment</li><li>Appropriate salary and social insurance payments in a timely manner</li><li>Improve talent development channels</li><li>Offer competitive salaries</li><li>Offer diversified welfare</li><li>Offer healthy and safe work environment</li></ul>
 Suppliers and other partners	<ul style="list-style-type: none"><li>Transparent procurement</li><li>Honest contract performance and integrity</li><li>Win-win cooperation</li></ul>	<ul style="list-style-type: none"><li>Open and fair procurement</li><li>Timely payment for goods</li><li>Support the sound development of suppliers</li><li>Improve supplier quality and technology</li></ul>
 Community	<ul style="list-style-type: none"><li>Protection of local environment</li><li>Support of community development</li><li>Charity and welfare</li></ul>	<ul style="list-style-type: none"><li>Take the actions of energy conservation and emission reduction</li><li>Protect ecological environment</li><li>Support public affairs of the community</li><li>Carry out charity activities within the community</li></ul>
 Government	<ul style="list-style-type: none"><li>Follow laws and regulations</li><li>Drive local economic development</li><li>Pay taxes according to law</li></ul>	<ul style="list-style-type: none"><li>Conform to laws and regulations</li><li>Pay taxes according to law</li><li>Offer job opportunities</li><li>Drive development of related industries</li></ul>
 Financial institutions, R&D institutions, media, etc.	<ul style="list-style-type: none"><li>Common development</li><li>Information disclosure</li></ul>	<ul style="list-style-type: none"><li>Carry out strategic cooperation</li><li>Strengthen industry, university and research cooperation</li><li>Organize activities such as visit and meeting</li></ul>

# 01

## Corporate Governance

Consolidate development foundation  
with sound and regulated operation

As a listed company on both Hong Kong and Shenzhen Stock Exchange, over the years, Goldwind always upholds integrity, honesty and compliance in its businesses and operations, continuously upgrading its corporate governance and internal management level, and creating values for shareholders and the society sustainably.



Corporate Governance

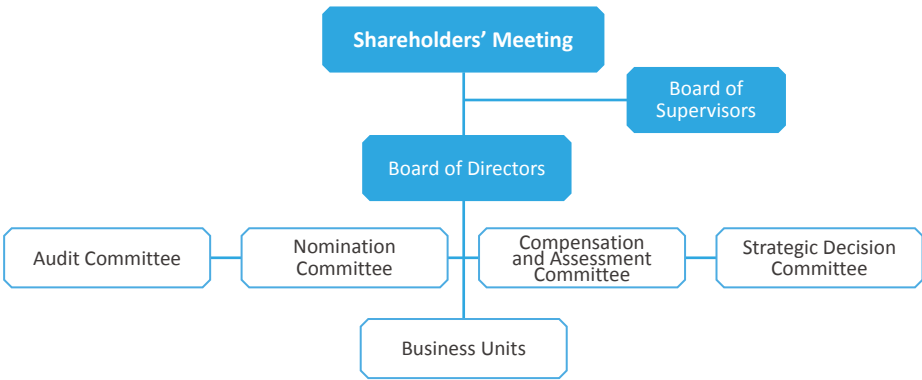
The Shareholders’ Meeting has ultimate authority. The Company convenes shareholders' meetings strictly in accordance with the regulations and requirements of the Rules for the Shareholders' Meetings of Listed Companies, Articles of Association, and the Rules of Procedure of Shareholders’ Meetings, and treats all shareholders equally, actively safeguards all shareholders’ legal rights ensuring that they can fully exercise their rights as Company shareholders.

The Board of Directors consists of nine directors, all of whom have deep industry and professional backgrounds and/or rich corporate management experience. In order to ensure the diversity of board members in terms of skills, experience and perspectives, and to improve the efficiency of board operations, and maintain a high standard of corporate governance, the Company formulates and abides by diversity policies and makes scientific and reasonable appointments of candidates by considering factors such as gender, race, age, language, cultural background, education background, industry experience and professional experience in accordance with the procedure set by the Nominating Committee. There are two female directors who account for 22% of the total number. The Board of Directors adheres to the communication and decision-making mechanism with integrating collective wisdom and making democratic decisions as its core, giving full play to the wisdom and professional capabilities of each director. When reviewing major issues, the Board of Directors seeks the opinions of each independent director regarding major issues such as capital operations, profit distribution, connected transactions, external guarantees, venture capital, and internal control self-assessment reports.

The Board of Supervisors is the Company’s permanent supervisory body, responsible for supervising the Board of Directors and its members. The Board of Supervisors also oversees the Company’s senior managers such as the President, Vice President, and Chief Financial Officer to prevent them from abusing their powers or infringing on the legitimate rights and interests of shareholders, the Company, and employees.

The Shareholders’ Meetings, the Board of Directors, the Board of Supervisors and the Special Committee of the Board are responsible for reviewing major matters related to corporate development. In 2020, the Company held eight board meetings and reviewed 55 proposals including annual reports and profit distribution plans. The Company held three shareholder meetings and reviewed 17 proposals. It also held five meetings of the Audit Committee, one meeting of the Nomination Committee, two meetings of Strategic Decision Committee, and one meeting of Compensation and Assessment Committee.

Goldwind strictly abides by laws and regulations and standardized documents such as the *Corporate Law*, *Securities Law*, *Governance Standards of Listed Companies*, *Corporate Governance Codes*, *Stock Listing Rules of the Shenzhen Stock Exchange*, and *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong*, and establishes a modern corporate system and operating mechanism comprising the Shareholders’ Meeting, the Board of Directors, the Board of Supervisors, and the management team. Under the Board of Directors, there is an Audit Committee, Nominating Committee, Compensation and Assessment Committee, and Strategic Decision Committee, and each specialize in its respective field to promote the efficient, scientific, and regulated operation of the Company.



Please refer to the "Corporate Governance" section of the *2020 Annual Report* (A-shares: 002202) or the "Corporate Governance Report" section (H-shares: 2208) of Xinjiang Goldwind Science & Technology Co., Ltd. for detailed information about the Company’s governance.

22%  
The percentage of female directors in the Board of Directors

Compliance Management

The Company adheres to integrity, credibility, and compliance. It fulfills the obligations of a listed company, continuously improves its compliance system with daily consultations, major issue assessments, compliance training and inspection, accepting feedback and suggestions to improve itself, and constantly refines corporate governance and compliance management systems according to laws, regulations and listing rules. A total of 13 regulations were formulated or revised throughout the year, including *Working Rules of the Secretary of the Board*, *Working Rules of the Independent Directors*, *Rules of Procedure of the Board of Directors*, *Rules of Procedure of the Board of Supervisors*, and *Registration System for Insiders of Inside Information*. According to the latest regulatory rules of both Shenzhen and Hong Kong and the Company’s compliance management system, the *Compliance Management Manual* was revised to provide effective support for the legal and compliant operation of various businesses. In addition, the Company tailors compliance training materials in accordance with different characteristics of subsidiaries and business units, providing them with multiple training sessions and promotional activities throughout the year, thereby enhancing their compliance awareness and capabilities and raising the overall quality of management.

The Company attaches great importance to risk management. It actively explores the establishment of an effective risk management mechanisms to effectively integrate risk management with business activities. In 2020, the Company identified key risks in each business area, defined corresponding risk response strategies, and broke them down into risk response measures that were continuously evaluated and iterated on a monthly basis until the possibility of risk occurrence or the impact could be controlled. For complex challenges and pain points, special solutions were formulated through system design, and integrated into processes and forms in order to strengthen their management. When solving risk problems, the Company performs in-depth analysis on the root causes of the problems, diagnoses the weak links in the management process system, continuously improves the management system, and makes efforts to establish a long-term risk prevention and control mechanism, so as to avoid the recurrence of similar risk problems.

The Company actively explores the measures to prevent risks from the source, focuses on improving the risk prevention capability of front-line personnel, continuously promotes the communication and exchange of information on internal and external risk management, and strengthens efforts on the risk culture construction, thus constantly creating the atmosphere of risk management. In 2020, the Company carried out post risk capacity building by means of trainings on legal, financial, marketing and other special risks and development of a series of online courses. It set the duration of different courses based on corresponding postilions to promote employees' risk awareness and management competency, and 8,731 people received the training throughout the year.

In 2020, the Company closely integrated the internal audit with internal control and risk management, optimized management documents and improved the maturity of management system in accordance with the requirements of *Guidelines on Enterprise Internal Control*. The Company further rectified problems based on the management assessment of the system implementation. The Company carried out the inspections in terms of procurement and supplier management, engineering project construction, production and manufacturing, logistics and transportation, innovative business, and other important areas, so as to identify defects and risks in the design and implementation of internal control, thus taking effective control measures to ensure the regulated and standardized operation of various businesses.



# Anti-Corruption

Under the guidance of the Board of Director Audit Committee, the Company has set up an independent Audit and Supervision Department to carry out anti-corruption work, including setting up and improving anti-corruption behavior and ethical standards, and optimizing related supervision, inspection and restriction mechanisms, to continuously improve its anti-corruption system and prevent the occurrence of corruption. In 2020, no legal proceedings related to company corruption were recorded.

In 2020, based on the risk prevention and control, the Company reviewed the implementation of relevant system process and control measures in key areas and critical steps of corruption prevention and control, introduced anti-corruption monitoring indicators, and conducted regular assessment, so as to ensure the effective implementation of the anti-bribery mechanism. In accordance with the World Bank's *Anti-Corruption Ethics and Compliance Handbook for Business* and other international guidelines, the Company has formulated and published the *Goldwind Professional Ethics and Code of Conduct*, which prohibits any form of corruption among its employees.

Through publicity and training, the Company continues to promote the requirements of anti-corruption management, carries forward the corporate culture of integrity and self-discipline, and reinforces the awareness of anti-corruption among employees, thus facilitating the sound development of the Company. In 2020, the Company carried out a series of training sessions in terms of integrity and self-discipline for different business areas. It recorded training video courses, and organized employees and suppliers to watch and learn. The major training includes:

- Interpretation of *Anti-Bribery Management System* and bribery case study for overseas employees
- Anti-bribery on-site training for the "Set out against the wind", fresh graduate training camp
- Anti-bribery on-site training for new managers
- Anti-bribery case study on-site training for wind farm project personnel
- Anti-bribery video training for new employees and suppliers

In order to ensure the effective operation of the complaint and report mechanism, the Company has published the telephone number and email address for complaint and report on its official website, office space, and other places to enable the stakeholders to report actual or suspected corruption incidents.

**Hotline:**+86-(0)10-67511888-1127

**Email:**audit@goldwind.com.cn

**Address:**Audit and Supervision Department, Goldwind Science & Technology Co., Ltd.  
No.8 Boxing Yi Road, Economic & Technological Development ZONE, Beijing, China

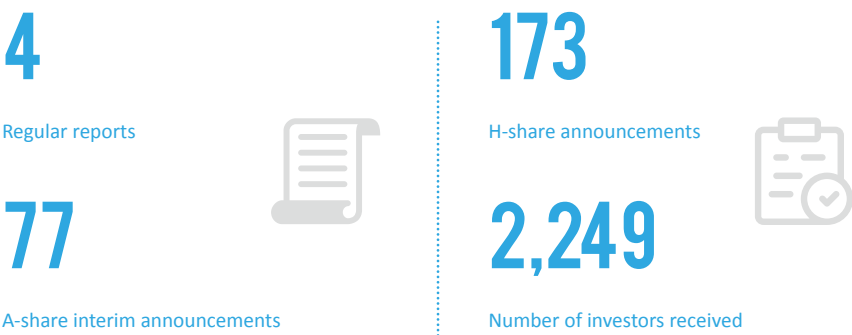
**Post Code:**100176

# Rights and Interests of Investors

The Company actively safeguards the legitimate rights and interests of investors, and discloses corporate information in a timely, accurate and complete manner. Its management has been continuously optimized to improve operating performance and realize value sharing with investors.

## Information Disclosure

The Company adheres to the principles of timely, accurate, complete, fair, and strict disclosure of consistent information in both exchanges. Under the premise of strictly abiding by the dual listing rules in Shenzhen and Hong Kong, the Company refines its information disclosure system and constantly improves the quality of information disclosure, so as to ensure that investors of both exchanges can have fair access to corporate information and fully understand corporate operation and business condition in a timely manner. In 2020, the Company issued 4 regular reports, 77 A-share interim announcements, and 173 H-share announcements, among which 72 were in both Chinese and English. Due to its excellent performance in information disclosure, the Company has been awarded Class A (excellent) rating for four consecutive years in the annual information disclosure assessment of listed companies by Shenzhen Stock Exchange.



## Investor Communication

The Company takes compliance and excellent investor service as its goal. It builds comprehensive, timely, and effective communication platforms and takes many approaches to interact and communicate with investors and potential investors, so as to continue to provide high-quality services for investors. The Company enhances transparency and increases investors' understanding and recognition of the Company through regular performance conferences and roadshows, regular surveys of investors, analyst meetings, as well as communication channels such as investor email, hotline, official website, WeChat official account, and WeChat group. In 2020, the Company organized 4 global performance conference calls and 56 performance roadshows, participated in 8 analyst meetings of major investment banks and held 2 online reception days, as well as 2 temporary conference calls, receiving a total of 2,249 investors throughout the year. It responded to all the questions investors raised through IR platform, email, and hotline, securing a response rate of 100%. In 2020, the Company won four awards of the 11th Tianma Awards, namely *Best Investor Relations Company Award*, *Best Secretary of the Board Award*, *Best Board of Directors Award*, and *Best New Media Operation Award*.

In order to handle investor complaints in a timely, efficient, and fair manner, the Company formulated and released the *Investor Complaint Handling System* in October 2020, which stipulated the channels, responsible departments and responsibilities, and handling procedures for investor complaints, so as to safeguard the legitimate rights and interests of investors, especially small and medium investors.



# 02

## Research & Development

Innovation Drives Development and  
Technology Enlightens Future

Technological innovation is the driving force behind human civilization. Goldwind strives to drive corporate development through technological development and pave a new path of innovation, which integrates theoretical research, scientific experiments, and digital twins by combining years of practical experience in the market to accelerate the process of wind power technology and product innovation. This philosophy also supports the overall improvement of performance of wind power products, develops diversified wind power application scenarios, and creates conditions for efficient production and usage of green energy.





# Management Based on Science and Technology Innovation

The Company regards innovation as the perpetual driving force for enterprise development and is committed to its innovation-driven development strategy. Based on the needs of the market and clients, the Company systematically plans the R&D and innovation of wind power technology and products, further improving the construction and management of technology innovation.

The Company continues to integrate internal resources for technological innovation, actively promotes the development of an independent innovation platform, and strengthens the interdisciplinary cooperation and collaboration behind innovation by bringing together enterprises, academia, and research institutes to promote the progress of key technological breakthroughs, technology introductions, joint design, independent R&D, and integrated innovation in the wind power industry chain, while improving its original innovation capacity. The Company has set up seven R&D Strategic Business Units (SBUs) around the world including several in China, Germany, Denmark, and the United States. These SBUs are mainly responsible for technical support of production and operation, new product development, and technical and test management. Each SBU has served as a driving force behind the Company and its wind power technology, product innovation, and industrial cooperation.



The Company attaches great importance to the investment in scientific research, constantly strengthens the training of scientific and technological talent, and cultivates and develops the ability of independent innovation to maintain the long-term ability of the Company. In 2020, the Company’s R&D investment was RMB 2,271 million, accounting for 4.04% of the total revenue ;there are 2,190 R&D engineers, accounting for 32.49% of total employees.

	2020	2019	2018
R&D investment (RMB 100 million)	22.71	15.57	15.77
R&D investment as a proportion of total revenue (%)	4.04	4.07	5.49
Number of R&D technicians	2,910	2,826	3,132
R&D technicians as a proportion of total employees (%)	32.49	31.54	35.78



# Product and Technological Innovation

The Company actively creates an innovative cultural atmosphere of respecting knowledge, talent, and innovation, and has established and improved upon the *Goldwind Group Incentive Management System for Technological Innovation*, *Goldwind Group Incentive Management System for Management Innovation*, and other innovation-related system documents to standardize the technological innovation management mechanism. By promoting innovation methods and tools such as TRIZ (Theory of Inventive Problem Solving) and IPD (Integrated Product Development), the Company holds technological innovation forums, scientific and technology innovation awards, and innovation conferences to stimulate employees further tapping into their potential to enhance the Company’s overall enterprise innovation ability. In 2020, the Company held the annual technological innovation conference with the theme of “Create the Future with Technological Innovation” to promote the development and reform of internal technological innovation and motivate the teams and employees who have made contributions in the field of technological innovation.

With an open and innovative mindset, the Company cooperates with industrial research experts at home and abroad, and fosters collaborative innovation with the upstream and downstream of the wind power industry chain, to implement integration of cross-circle and cross-field innovation of new technologies, new materials, and new processes, cultivating new growth potentials for the wind power industry by promoting the professional and intelligent development of the industry with core technology breakthroughs.

## » Scientific and Technological Innovation Achievements

By relying on the Permanent Magnet Direct Drive wind power technology with independent intellectual property rights, Goldwind integrates cutting-edge technologies such as big data, artificial intelligence, and cloud computing to innovatively develop high-performance flagship products, while comprehensively improving the performance and intelligence level of wind turbines, so as to provide clients and wind power market with renewable energy solutions of higher quality and better performance with the lowest cost. In view of diversified demands for wind turbine products from wind power developers, the Company has established a platform/module-centered development concept which adopts the production method of mass customization and comes up with as many wind power product categories as possible by combining the types of finely designed components to provide customized wind power products and services.

## WindMaster platform: The wind turbine intelligent control system

By integrating digital models, advanced algorithms, and intelligent sensor technology, the Goldwind WindMaster platform can help wind turbines handle faults caused by the machine's own abnormal state or external occurrences. WindMaster platform can also help wind turbines adapt to extreme cold, extreme heat, lightning and thunderstorms, and other complex and erratic project operation environments. The platform then effectively reduces or avoids safety risks and accidents. As a result, the capacity of the wind farm project can be optimized and increased by 2%-4% under the original conditions, and the operation and maintenance cost could be reduced by as much as 1%-2%.



## GP21 product series: The third-generation Permanent Magnet Direct Drive (PMDD) platform

Goldwind's latest evolution of its PMDD platform is the GW165-4.0 MW wind turbine released in 2020. The newest machine in the GP21 product series is for medium to low wind sites and is the Company's high-performance flagship turbine. It can lower the targeted wind speed to 5 m/s and effectively utilize the wind energy resources with low wind power density grade. This model has the largest rotor diameter among 4 MW-class wind turbines in China. It can improve the power generation performance, make full use of the wind turbine site, and significantly reduce the construction cost.



## The world's tallest prestressed frame type steel tower

The prestressed frame type steel tower, developed together with Qingdao Huastro and Tongji University, adopts the structure of frame type tower + transition sections + tower sections to solve problems such as welding fatigue and break tower height and load limits. It not only improves the safety of the tower and prolongs its service life, but also ensures better access to wind resources, improving the efficiency of power generation. In September 2020, the world's first 160-meter frame type steel tower was connected to the grid for power generation in Juancheng, Heze, Shandong, marking the successful application of prestressed frame type steel tower project.



## Customized service life solutions for wind power projects

The comprehensive solution for improving quality and efficiency of the GW1S stock assets was developed to retrofit and/or repower older generation wind turbines by replacing old components with new components and new technology. By taking GW1S stock assets, projects realize renewed levels of reliability, power and performance, and they have greatly reduced the risk of operation as the project ages. This customized solution can solve common problems with aging assets like low revenue due to downtime and lower power production, risk of quality and safety of older components, and higher costs related to operation and maintenance of old wind farms. Rooted in Goldwind's 20,000+ installations of 1S turbines with superior reliability and performance, this solution allows customers to upgrade their machines to increase the power and lifespan of their wind project.

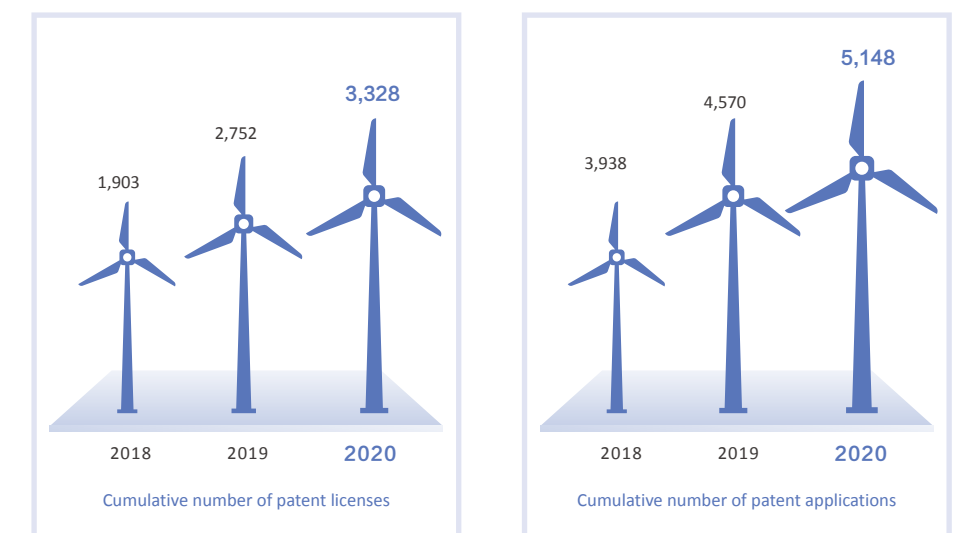


Windpower Monthly, a global wind power publication, recognized Goldwind's several wind turbine models in their 2020 Best Wind Turbine Awards. The GW82-1.1 MW won the Gold Award for Best Onshore Wind Turbine (under 4.4 MW).

## » Protection of Intellectual Property Rights

The Company actively carries out intellectual property rights protection, sets up intellectual property management organizations, formulates well-organized management systems, and constructs a complete intellectual property business processing flow. A special patent database for wind power has been established to facilitate mastering of the technological development trends of the industry through the latest patent applications in the field of wind power. The Company continues to reinforce the efforts on patent applications, strengthen the distribution of intellectual property rights for key technologies, intensify the protection of core wind power technologies, and build a patent risk prevention and control mechanism covering the whole process of wind power products and project development.

As of December 31, 2020, the Company has made 4,486 patent applications in China, of which 2,519 are invention patent applications, accounting for 56% of total applications. The Company has obtained 3,100 patent licenses in China, of which 1,257 are invention patent licenses, accounting for 41% of total licenses. The Company has made 662 patent applications and obtained 228 patent licenses overseas.



In the process of technology introduction and cooperation, the Company grasps the development of similar technologies at home and abroad through patent search and analysis. It reviews and predicts the introduced projects, searches for patent information, and learns about the scope of patent protection and technical content, as well as the legal information of the patentee, patent duration and protection region, so as to respect and avoid infringing on others' intellectual property rights.








# Driving Development of the Industry

## » Deepening Exchanges and Cooperation

The Company gives full play to its leading role in the industry and continuously invests in technology R&D, industrial chain resource integration, international exchange and cooperation, and industrial talent cultivation in order to contribute to industrial development and progress.

The Company actively cooperates with local government, industry associations, and other leading organizations to exchange ideas and best practices regarding wind power industry innovation. It also cooperates closely with enterprises, universities, and research institutions to carry out special research projects, and also works together with top experts and scholars in wind power-related fields to promote the development of wind power industry.

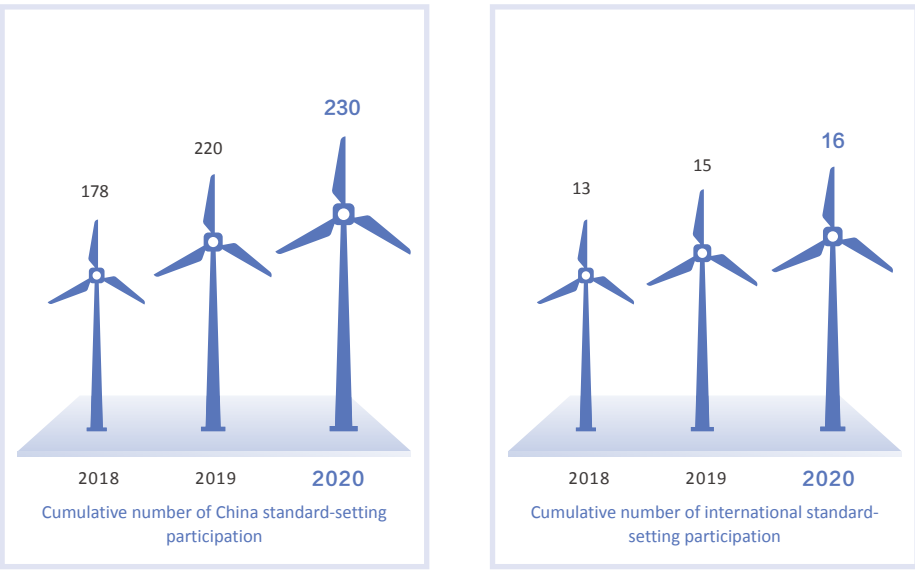
Partner	Content of Cooperation
 Supplier	The Company hosted the "Founding Conference of Collaborative Innovation Alliance of the Whole Industrial Chain for Wind Power Castings", where more than 20 supplier representatives gathered to conduct in-depth discussion on new technologies, new processes, and new materials to promote the technological breakthrough and innovation of wind power casting industry.
 Enterprise	The Company carried out crossover cooperation with BYD in the field of energy storage application and developed energy storage products and system solutions with higher reliability and stronger cost competitiveness for different energy storage scenarios in the field of renewable energy, so as to improve the consumption and utilization of renewable energy, and promote the transformation and upgrading of energy production and consumption.
 Colleges and Universities	The Company cooperated with Shanghai University of Engineering Science to develop a 3.3 MW distributed photovoltaic power generation project to be used in the smart campus project. Based on a variety of modern Internet technologies, the Company planned and designed a campus photovoltaic and energy management platform, and built a smart energy efficiency platform suitable for colleges and universities.

In November 2020, at the *2020 Annual Conference of National Large-Scale Wind Energy Equipment Industry and Wind Power Industry Development Forum* sponsored by the Chinese Wind Energy Equipment Association (CWEEA), the Company and the participating wind power enterprises jointly launched the *Proposal for China Wind Power Equipment Manufacturing Industry to Achieve the "30-60" Target*, and pledged to provide critical support for energy security, green and low-carbon development, and ecological civilization construction.



## » Participating in Standard-Setting

The Company leads the development of the industry by participating in the formulation and revision of standards in the field of wind power technology, as well as drawing up technical specifications. By the end of 2020, the Company has presided over and participated in the formulation of 246 standards, including 230 China standards and 16 international standards.



## » Cultivating Talents for the Industry

In the process of implementing the development strategy of renewable energy and promoting the development of a green industry, the Company always regards cultivating talent for the industry and the society as the second category of products and an important social responsibility, in addition to its main business. In 2011, the Company established the first enterprise university in the wind power industry in China, catering to employees, suppliers, clients, and other industry personnel. With the goal of cultivating excellent value creators for the new energy industry, the university accumulates and shares knowledge and experience, builds curriculum systems and learning platforms, and provides professional and customized learning and development programs for talent within the Company and the industry. In 2020, the Company carried out customized training programs for clients and provided training services for professional and technical personnel. More than 460 representatives from the clients received trainings. Special training camps were launched for suppliers and service providers as well. Professional trainings and exchange learning activities, such as NDT certification, APQP4Wind, and road alignment survey were organized. More than 400 representatives from the suppliers received trainings.

In 2020, relying on the developed practical training platform of the overall wind turbine and the standardized operation and maintenance training system, the Company assisted Guohua Energy Investment Co., Ltd. to carry out the first "Qiji" (Swift Horse) talent project of wind power operation and inspection skills competition. Focusing on the wind power operation, maintenance test of electrical equipment, doubly fed and direct-drive wind turbine maintenance, integration of transportation and inspection. These and other operations exercises helped Guohua to improve the technical capabilities of wind power operation and maintenance personnel and explored the establishment of a sound talent training system for the wind power industry.

# 03

## Products and Services

Quality is the Foundation for Building up  
the Value of Wind Power

Goldwind roots its business objectives in being a net-positive contributor to the global society and well-being of human life. The Company continuously consolidates and expands its strengths in the field of wind power, further providing comprehensive solutions for wind turbines, wind power service and operations, and wind farm development. In addition, Goldwind goes beyond the scope of wind power to include a strong emphasis on the development of other renewable energy technologies including smart microgrids, distributed energy resource (DER), and water treatment — thus striving to combat the effects of climate change through clean energy and environmental protection.



# High-quality Wind Turbines


## » Quality Management of Wind Turbines

The Company attaches great importance to the quality management of wind turbines, and takes the initiative to manage the impact of wind turbine operation on the society and the environment by leading innovative sustainable programs. Goldwind constantly optimizes the health, safety and environmental performance of wind turbines through technological innovation and strives to manufacture best-in-class wind turbines in terms of quality, safety, and environmental protection.

The Company regards product quality as the lifeline of its business. The Company proposes that the wind power business is like a long-distance running. Whoever has the best quality owns the future. Goldwind’s *Long-distance Running in Wind Power* concept is represented in the Company as a five-dimension quality management model based on corporate culture, technology innovation, outstanding leadership, optimized industrial chain, and customer experience. The five-dimensions assist the Company in safeguarding and improving the quality of wind turbines in a wholistic way and guarantees the reliable operation of Goldwind wind turbines throughout their life cycle of 20 to 30 years.


Dimensions	Main Contents
 Corporate Culture	The Company builds a quality-oriented corporate culture, implements the concept of honesty and responsibility, prevention at the source, precision and self-discipline, pursuit of excellence, and contribution to the success of others and seeks to do things right and well the first time. In 2020, the Company promoted the quality-oriented corporate culture and enhanced employees’ quality awareness by issuing journals, recording online training courses, holding quiz contests and practical skill contests, and making themed speeches on product quality.
 Technology Innovation	The Company places a strong emphasis on innovation of its wind power technology. Through in-depth research and improvement on quality, R&D and design can improve product quality and reliability for current and next generation Goldwind technologies.
 Outstanding Leadership	The Company has established the Quality Management Committee who addresses known or potential major quality problems and review proposals for improvement – further strengthening the Company’s , quality management processes.
 Optimized Industrial Chain	The Company takes great pride in its industrial chain which is rooted in excellent quality, leading technology, optimal life-cycle cost, and strong market competitiveness. This provides quality management oversight throughout the entire industry chain process from bringing in raw materials to delivering wind turbines. In 2020, the Company worked with suppliers to carry out Turbine Quality Management (TQM) reviews, critical post-certification trainings, special quality improvements, and other activities, that supported the ongoing improvement of quality management among suppliers.
 Customer Experience	The Company extends product quality management to the operation stage of wind turbines, to support the reliable and profitable operation of wind turbines throughout the life cycle. In facing the dual pressure of the COVID-19 pandemic and unprecedented demand for wind power equipment, the Company set up a quick response team for customers’ requests. This team helped organize, evaluating and solve regular requests based on urgency and level of seriousness and improve the efficiency of response to customers and coordination within the Company. Concurrently, the team also conducted in-depth research on customer satisfaction for the Company’s quality and services of wind power products, service, warranty, and maintenance, responding to customer concerns and continuously improving the customer experience.

In order to strengthen the supervision and management of wind turbine quality, the Company carries out quality verification in three stages — component procurement, manufacturing process, and wind turbine delivery — and establishes a correlated evaluation mechanism to uphold the quality of wind turbines.




### Component procurement

The Company checks the quality of components through first component inspection, on-site test run and small-batch inspection, and inspects the quality of batch products through quality monitoring, process check, system-based quality review, unannounced inspection, and examination upon reception/delivery.



### Manufacturing process

The Company identifies critical processes, characteristics and risks in wind turbine manufacturing, and make corresponding plans for process quality control. According to the *General Inspection Specifications for Assembly Process of Goldwind MW-Class Wind Turbines*, the Company proceeds with inspection amid the manufacturing process of wind turbines, simulates real-scenario operations with adjustment-free test tooling and ensures that wind turbines function well.



### Delivery of wind turbines

The Company reexamines and verifies whether the wind turbine documents, packaging and transportation are consistent with the standards upon the delivery of wind turbines according to the *General Inspection Specifications* for the delivery of wind turbines.

The Company has formulated rules and regulations including the *Customer Complaint Handling Process* and *Regulation on Quick Response to Wind Farm Failure*. Goldwind has an established customer complaint response mechanism, a management team to classify and manage complaints accordingly, and implemented an accountability and inter-departmental collaboration mechanism. The Company also evaluates overall effectiveness of problem-solving in accordance with the *Assessment on Solutions of On-site Complaints and Customer Complaints*. In 2020, the Company received 15 customer complaints, and the handling rate was 100 percent.

The Company focuses on improving customer experience and protecting customer information. The Company conducts the self-assessment and third-party surveys to understand first-hand our customer’s level of satisfaction, and employs scientific statistical methods to analyze the change of trend in data, thus continuously improving the quality of its wind turbines and services.





## » Wind Turbine Environment and Safety Management

The Company is committed to managing the impact of wind turbines on environment, health and safety, and identify and avoid and/or eliminate the adverse effects and potential risks of wind turbines during installation, operation, and maintenance. Goldwind further commits to providing wind turbine products and services conducive with being a positive contributor to society and the environment throughout its value chain.

The Company has developed and improved the *Goldwind Turbines HSE Design Requirements* to clarify the design requirements of wind turbines in mechanical safety, electrical safety, environmental protection, and occupational health, so as to ensure the safety and environmental performance of wind turbines. To address the environmental consequences of wind turbine operation, for example on bird migration, noise, and flickering light, the Company works to design and produce environmentally friendly wind turbines through technological innovation and advanced turbine control management. In 2020, based on Goldwind's permanent magnet direct-drive (PMDD) wind turbines, the Company evaluated the effectiveness of different bird deterrents. Through the use of a variety of deterrent operation modes including reduced power, varied size of rotor diameters, voice deterrents, ultrasonic deterrents and laser deterrents, the Company reported an effective mitigation on bird flight paths that range extend more than 150 meters from the wind turbine unit.



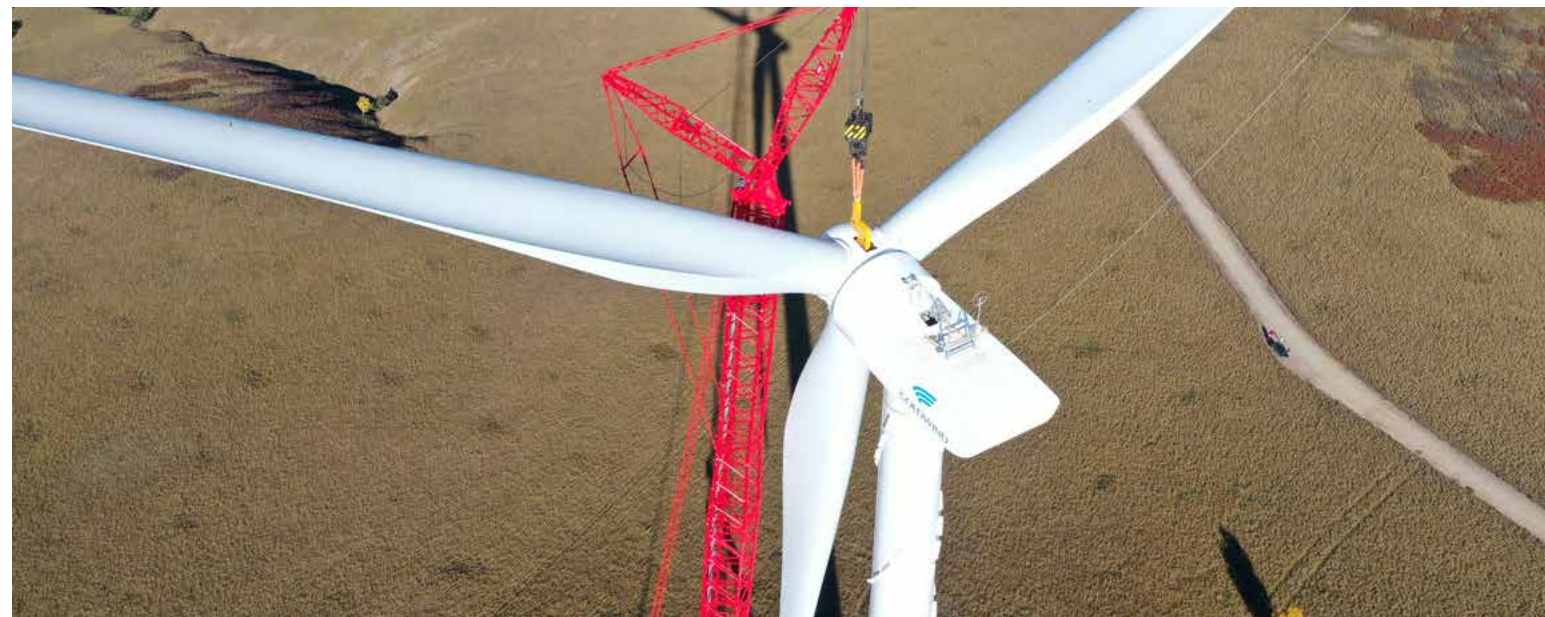
### Wind turbine life-cycle assessments (LCA) was carried out

The Company focuses on the environmental impact of wind turbines in the entire life cycle. In 2020, the Company launched life-cycle assessments (LCA) of the latest wind turbines on the 4S platform – the GW136-4.2 MW and GW155-4.5 MW. According to the ISO 14040 and ISO 14044 standards, the Company analyzed the resources, energy and waste involved in manufacturing wind turbines, as well as the environmental impact during raw material acquisition, production, operation and maintenance, and decommissioning, as well as power transmission and distribution.

The Company analyzed the wind farm with moderate wind conditions (IIIB/S) located in Saskatchewan, Canada. The representative wind farm featured 22 GW155-4.5 MW wind turbines with a total rated power of 99.0 MW, and the power generated is distributed to the local grid with rated voltage of 245 kV. After careful data collection, analysis and calculation, a GW155-4.5 MW wind turbine emits 7.25 g carbon dioxide per unit of energy production over a 20-year life-cycle. According to the same calculation method, a GW136-4.2 MW wind turbine emits 8.04 g carbon dioxide per unit of energy production over a 20-year life-cycle. For coal-fired electricity, the domestic carbon dioxide emission per unit of electricity production is about 838 g<sup>1</sup>. As a result, the carbon dioxide emission per unit of energy production of wind power is less than one-percent (1%) of that of coal-fired electricity.

<sup>1</sup>Data from China Electric Power Industry Annual Development Report 2020 released by China Electricity Council

◆ The energy payback time of the Company's GW155-4.5 MW wind turbine is 6 months, which indicates the energy production of one GW155-4.5 MW wind turbine during 6 months of grid connection is equivalent to the total amount of the energy consumed over its entire life cycle. Meanwhile, according to the calculation of the average domestic grid emission factor, the carbon emission reduction generated by the energy production of one GW155-4.5 MW wind turbine for 3 months can offset the total carbon emission generated in its whole life cycle.



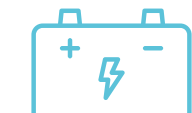
## Reliable Green Power

The Company has developed core wind power technologies such as the distributed energy resource, integrated energy supply, advanced energy storage technology, and smart and digital management solutions, which provide diversified energy products and solutions in terms of grid, source, load, storage, and control.



### Distributed Energy Resource (DER)

Based on customers' energy needs and the further development of on-site or other local clean energy production, deployment of distributed energy resources relies on scientific planning and rational allocation. To achieve optimal allocation of diversified energy resources, the Company works in collaboration with customers to aid in reducing energy consumption cost and improve energy utilization rate through clean energy technologies.



### Energy Storage System

The traditional centralized energy storage system is divided into the electronic-control energy storage system and the battery-driven energy storage system. The energy is stored or released according to different battery usage scenarios, which effectively reduces operation risks and costs of energy storage systems, realizes the standardized operation of the systems, and lays the foundation for the local deployment and consumption of the wind power.



### Goldwind's first wind power storage project was completed and put into operation

In December 2020, the step-up substation primary energy storage system for the Company's first wind power storage project—Anhui Lingbi Phase I a 50 MW wind turbine project and 10 MW/10 MWh Energy Storage Project (hereinafter referred to as "Lingbi Project")—passed its pilot operation.

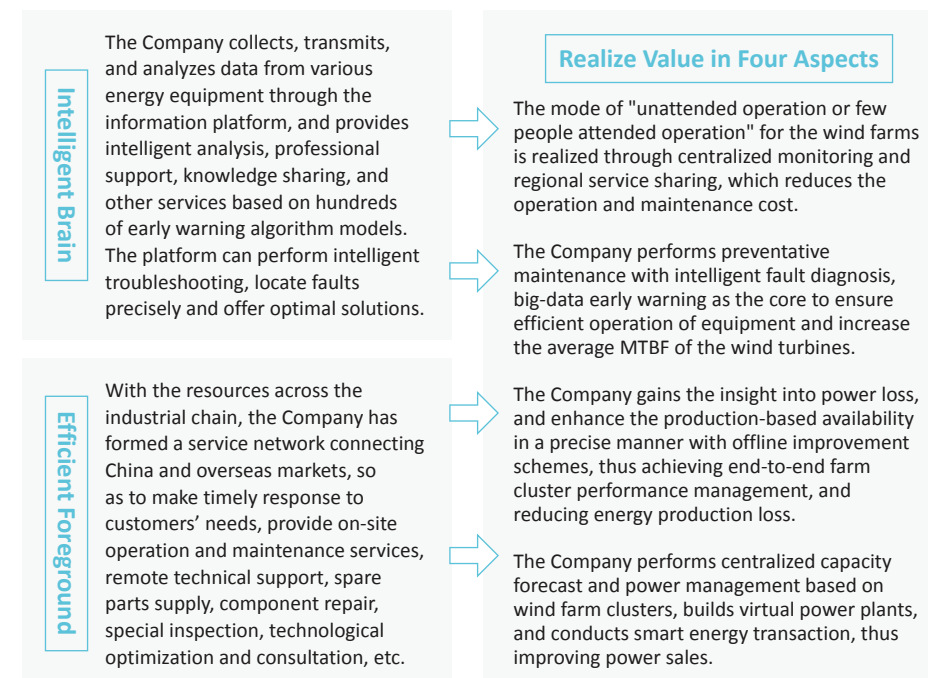
The Lingbi Project includes a combination of sixteen GW140-3.0 MW and one GW121-2.0 MW permanent magnet direct-drive (PMDD) wind turbines, and 10 MW/10 MWh energy storage systems. After being officially put into operation, the project will greatly improve the operation and control of the wind farm and the overall control over peak and frequency of the grid, and play an important role in ensuring the safety of large grids and the consumption of the new energy. This project is Goldwind's first operating demonstration project that integrates wind power and energy storage, and it is also the first energy storage demonstration project in China. It demonstrates multiple applications and the effects of energy storage on the power supply side -- an important reference for the future development of co-located energy systems.

The Company develops and builds wind farms all over the world to continuously generate green power and promote the adoption of green energy. In 2020, the Company realized grid connection with two Argentina wind farms: Loma Blanca Phase II wind farm and Miramar wind farm. It made breakthroughs in Canada, Kazakhstan, Turkey, Pakistan, Greece, Vietnam and other overseas markets.

In 2020, the newly installed grid-connected capacity of the Company's owned and operated wind farms worldwide reached 1,238 MW. By the end of 2020, Goldwind's accumulative installed grid-connected capacity has reached 5,487 MW worldwide. Annual energy production reached more than 10.97 billion kWh worldwide.

## Intelligent Operation and Maintenance Services

To assist in the stable operations and energy production of Goldwind wind turbines throughout their life-cycle, the Company features a life-cycle service concept that uses the Internet of things, big data, cloud computing and artificial intelligence to build the wind power intelligence operation system. The result is that when these data points are brought together, the Company can establish a service methodology that features in-depth integration of online and offline operations and a centralized, shared and smart operation for the wind project.



The Company when facing the needs of customers in equipment upgrades and retrofits, will conduct a comprehensive test and evaluation of the wind farm, tailor performance optimization, increase energy production, extend service life and other value-add schemes to enhance the customers' assets. For the turbines that are going to be decommissioned or have been decommissioned, the Company, in accordance to the policies of the local grid companies and the local government, provides tailor-made solutions for old device replacement for customers, including cost evaluation, financial planning, wind farm planning and design, construction, and operations and maintenance so as assist customers in achieving higher investment returns.



### The first retrofit project wind turbines in mountainous areas in southern China passed inspection and acceptance

The Xianjuding Project of State Power Investment Corporation Hubei New Energy Co., Ltd. (hereinafter referred to as "SPIC Hubei New Energy") realized grid connection in March 2010 and has been in operation for 10 years. To achieve the goal of increasing energy production without changing the rated capacity, the Company worked with SPIC Hubei New Energy on the optimization of current assets by setting up a research and development team. While keeping the overall capacity of the wind farm unchanged, the team upgraded fixed pitch systems to the variable pitch system, and lengthened blades to optimize the operation of the wind turbines. After the retrofit, the overall energy production is expected to realize and increase of 70 to 100 percent. While increasing energy production, the project also made full use of the original facilities and stored parts of the old machine as spare parts to minimize the investment for any future retrofits or repairs.

## Water Treatment

50+

Water treatment projects

3.5 million tons

Water treatment quantity per day

While consolidating its main services, the Company actively expands other energy-saving and environmental-friendly businesses to expand its positive contributions towards the sustainable development of the environment and society as a whole. In view of the rapid growth of water demand, severe water pollution, and shortage of water resources in China, the Company established Goldwind Environmental Science & Technology Co., Ltd., which specializes in the investment, design, construction, operation, and management of water business projects. Goldwind Environmental Science & Technology covers several areas including water supply, sewage (including industrial wastewater) and sludge treatment, and ecological environmental governance. By the end of 2020, the Company had lead more than 50 water business projects covering 13 provinces and cities in China, with more than 3.5 million tons per day of water assets, providing water supply and sewage treatment services for more than 10 million people.

The Company actively promotes the high-quality development of its businesses, standardizes water plant management, adopts precise

process control, regularly analyzes treatment performance, summarize process and operational practices to continuously improve the quality management of water plants and ensure the stable operation and 100 percent discharge compliance of water plants. In terms of water treatment technologies, the Company adheres to practice-oriented innovation. The three technologies developed by the Company --digital precise dousing system, sewage plant decanter upgrade, and nitrogen catalytic reduction-- are of great practical value in water plants and provide strong technical support for the continued compliance of water treatment.

The Company continues to build its digital capabilities. Based on Goldwind environmental intelligent water business platform, coupled with the use of new energy technologies and Energy Internet, the Company conducts intelligent operation, big data analysis and mobile monitoring to improve the automation, intensification, and intelligent management of water plants. The result is carrying out energy use in a clean and low-carbon manner while realizing the concept of green and sustainable development.



◆ Jiangsu Shuyang Sewage Plant of Goldwind Environmental Science & Technology Co., Ltd.



# 04

## Environment

Protecting Clean Water, Clear Skies, and  
Ecological Civilization

Addressing climate change is one of key elements of the United Nations Sustainable Development Goals. The goal promotes the principle that enterprises shall fulfill their social responsibilities and promote global sustainable development. Goldwind actively responds to global climate change policies and national energy strategies, brings out the role of the new energy industry in the optimization of energy infrastructure and the development of an ecological civilization, and strengthens its own environmental management system in the field of clean energy, energy conservation, and environmental protection.



# Response to Climate Change

Climate change is a major global challenge facing mankind today. In September 2020, when delivering an important speech at the General Debate of the 75th Session of the United Nations General Assembly, President Xi Jinping pointed out that China will scale up its Intended Nationally Determined Contributions by adopting more vigorous policies and measures, aiming to peak its carbon dioxide emissions before 2030 and achieve carbon neutrality before 2060. Wind power is an integral part of the renewable energy transformation. As a green power with low carbon emissions, it is an important energy source for achieving long-term, sustainable development worldwide. With the technological progress of the wind power industry and the expansion of wind power applications, the cost of wind power continues to decline, nearly at cost parity with that of conventional energy, making wind power an important driver for governments to promote energy transformation and address climate change. The Company has always set its vision and objectives on delivering high-quality, high-performing wind turbines to the global

market worldwide in furtherance of its mission of Innovating for a Brighter Tomorrow. Since 2001, the Company has installed wind turbines worldwide to generate cumulative green power generation of 146 billion kilowatt-hour (kWh). Compared with coal-fired electricity, wind power can reduce carbon dioxide emissions by 122 million tons.

The Goldwind Yizhuang Smart Park is a green park ecosystem integrating renewable energy, smart microgrid, smart water treatment, green agriculture, and sports & wellness. Clean electricity is utilized efficiently in the park through the deployment of 4.8 MW distributed wind power, 1.3 MW distributed photovoltaic power, and vanadium redox flow batteries, lithium batteries, ultracapacitors and other forms of energy storage. In 2020, in support of China's carbon neutrality goal, the Company purchased China Certified Emission Reduction (CCER) to offset greenhouse gas emissions from the park. Goldwind's Yizhuang Smart Park is now China's first industrial park to achieve carbon neutrality.



◆ Goldwind Yizhuang Smart Park has been certified as China's first carbon neutral smart park with renewable energy.

The research of the Intergovernmental Panel on Climate Change (IPCC) indicates that global climate change is causing more extreme weather with more intense, frequent climate events. Thunderstorms, ice and snow, sandstorms and extreme low and high temperatures have certain influences on wind project site selection, construction, turbine suitability, stable operations and, most importantly, the safety of those working for and around a wind project.

Goldwind's robust R&D division among many others studies and analyzes the possible scenarios of climate change and extreme weather events and its impact on the Company's production, development, installation, and operation of wind turbines. Through their efforts the Company then deploys technological countermeasures and

solutions to address these events before they happen. Besides, Goldwind continues to enhance the environmental adaptability of wind turbines in different extreme weather conditions such as typhoons and hurricanes, extreme lightning and thunderstorms, extreme high and low temperatures, and high levels of salinity. Based on the long-term statistics released by local meteorological departments, the Company uses mathematical statistics and probability theory to create computer simulations of the changes in the atmosphere in the immediate future, forecast meteorological disasters in the place where a project operates, assesses the risk of a possible extreme weather event or disaster, and formulates a risk profile and management system in response.

## Meteorological disaster risk management during the life cycle of wind power projects

Siting planning stage	The Company collects data related to meteorological disasters released by meteorological stations, including frequency and intensity of typhoon, strong gust, heavy precipitation, extreme temperature, severe convective weather, lightning and so on, so as to avoid developing projects in high-risk areas.
Wind resource measurement stage	The location of the met mast should be cautiously decided so that it can objectively reflect the intensity and frequency of meteorological disasters in the area for project development. The met mast should be designed specifically to prevent the loss of equipment and data caused by meteorological disasters.
Feasibility study and preliminary design stage	The Company carries out risk assessment of meteorological disasters, makes proper design and chooses suitable types of wind turbines, and selects appropriate wind turbines for low-temperature or high-temperature and tower panels, while keeping in compliance with relevant national design specifications.
Project bidding procurement stage	The Company makes comprehensive analysis on the design requirements of wind turbines and its auxiliary equipment, such as earthing for lightning protection in areas frequented by strong thunderstorms and de-icing of wind turbines in freezing areas.
Wind farm construction stage	The construction period shall be reasonably planned according to meteorological information. Contingency plans for meteorological disasters shall be established to prevent or reduce risks. The implementation of measures for risk prevention and control and construction management shall be supervised by supervision contractor with regular inspection and supervision.
Project operation stage	According to the characteristics of risky projects and meteorological disasters, the Company provides professional emergency and rescue equipment based on the meteorological forecast and early warning system. The Company integrates related factors of meteorological disasters into operation management regulations, formulates specific management guidelines and contingency plans, carries out regular training and emergency drills for wind farm operators and improves risk response capability.





# Utilization of Energy and Resource

63%

The percentage of green electricity

0.0118

ton of standard coal/ RMB 10k

Overall energy consumption per RMB 10k revenue

53 tons

Water consumption per capita

As a steward of clean energy and conservation, Goldwind aims to reduce its impact on the environment. The main source resource Goldwind uses when conducting R&D, manufacturing wind turbines, providing wind power services or developing wind farms, is electricity for office work and production, gasoline for the business vehicles that are not electric, diesel fuel for engineering vehicles, and liquefied petroleum gas for employee catering. The Company’s water treatment business mainly relies on electricity and takes only a small percentage of water from the environment. Water is mainly used for employees’ offices and canteens and in the process of wind farm development and construction, only a small amount of water is used for construction, dust control and plant watering.

In 2020, the Company revised the Goldwind Group’s Regulations on Resources, Energy and Ecological Protection Management and strengthened energy consumption management by categorizing the consumption of electricity, gasoline and diesel. The Company explored the energy conservation and consumption reduction potential of each subsidiary, set targets of different levels of energy conservation and consumption reduction, and regularly analyzed the completion of the targets so as to ensure the decrease in overall energy consumption year by year.

### Amount and Density of Primary Energy and Resource Usage of the Company

Types of energy and resource	2020	2019	2018
Power consumption (coal-fired electricity) (100 million kWh)	1.80	1.57	1.05
Power consumption (wind/solar) (100 million kWh)	3.08	2.97	2.60
Gasoline <sup>1</sup> (kL)	2,154.83	3,948.66	2,190.22
Diesel <sup>2</sup> (kL)	2,555.19	2,746.93	1,357.45
Liquefied petroleum gas <sup>3</sup> (ton)	21.92	33.75	31.11
Natural gas (m <sup>3</sup> )	48.61	49.73	50.73
Overall energy consumption per RMB 10k revenue <sup>4</sup> (ton of standard coal/RMB 10k)	0.0118	0.0168	0.0173
Water consumption (10k tons)	47.81	45.71	40.43
Water consumption per capita (ton/capita)	53.33	51.01	46.19
Packaging material of wood (ton)	3,199.57	3,004.27	2,145.09
Density of wood packaging usage (ton/pc)	0.67	0.71	0.75

Note:<sup>1,2</sup> In 2020, the Company included the energy consumption generated by renting third-party transportation equipment (including cars, ships, etc.) into the statistics, and traced the data for 2018 and 2019 according to the expanded statistical scope; at the same time, affected by the epidemic, in 2020, the company’s travels decreased, the number of transportation equipment used decreased, and the fuel consumption decreased

<sup>3</sup> In order to make the statistical data closer to the actual situation, the company changed the statistical unit of liquefied petroleum gas from 10,000 cubic meters to ton in 2020, and recalculated the data for 2018 and 2019 according to the same conversion method.

<sup>4</sup>For the calculation of comprehensive energy consumption of various energy and resources, see GB/T2589-2008 *General Principles of Comprehensive Energy Consumption Calculation*

The Company advocates for the adoption and use of green electricity and smart energy usage. Based on its accumulated experience and advantages in renewable energy, and its energy management supported by the Internet and renewable energy technologies, the Company promotes the use of renewable energy together with other clean energy resources to improve the efficiency and reduce cost. The Company successively constructed smart parks including the Goldwind Yizhuang Smart Park, Yancheng Dafeng Wind Farm in Jiangsu Province, and Zhangjiakou Renewable Energy Industry R&D and Manufacturing Base in Hebei Province. It has deployed smart energy efficiency management platforms, and monitored various energy consumption and emissions online to make corresponding statistical analyses. By continuously analyzing energy data, the Company can identify and embark on the technical routes for energy conservation retrofits. Goldwind has installed two PMDD wind turbines, a GW131-2.3 MW and GW106-2.5 MW as well as PV panels, micro-wind turbines, and other equipment at the Beijing Yizhuang Smart Park. The Company has also installed more than 30 DC/AC charging piles in the park to enable employees to charge their own personal electric vehicles.



### Zhangjiakou Turbine Assembly Plant transformed into a green plant

Goldwind Zhangjiakou Turbine Assembly Plant is located in Zhangjiakou City, Hebei Province. It is the only domestic plant that manufactures onshore MW-class wind turbines. The plant adopts the flexible production-modular assembly line and production information management system, and owns smart equipment such as transport vehicles for assembly line platforms, mechanized yaw system equipment, automatic base turning equipment, automatic bolt-tightening robots, and more. Zhangjiakou General Assembly Plant adheres to the concept of green development and builds a green development system. The plant has built an energy management center (Goldwind smart energy efficiency management platform), installed 18 smart meters, two wireless transmission modules and one smart data collector to conduct real-time data monitoring of power consumption in order to produce forecasts and early warnings based on the statistical data extracted and analyzed from the back-end database. The plant has implemented several energy-saving retrofit projects including the "frequency converter retrofitting of bridge crane", "frequency converter retrofitting of heating furnace" and "frequency converter retrofitting for delivery inspection". The overall energy consumption per product is 15.73 kgce/piece (set), which is highly efficient by the domestic standard. In May and October 2020, the plant was awarded the "Green Factory" title by Hebei Province and the National Ministry of Industry and Information Technology.

To improve the performance of worn-out products and realize the maximum utilization of resources, the Company has carried out remanufacturing engineering design for main models designed with direct-drive and doubly-fed wind turbine technologies based on the comprehensive analysis and evaluation of the performance and life of worn-out and damaged parts of wind turbines. A number of relevant advanced manufacturing technologies have been adopted to modify wind turbine parts including electrical control parts, gearbox, generators, and blades, so as to enable the product quality and performance to be on par with or exceed that of the original new products. The Company has Remanufacturing Technology Development Center and Service Center to set up a systematic process ranging from worn-out parts recovery, logistics transportation, cleaning and dismantling, technology development, process standards, inspection and testing, to large-scaled application. More than 10,000 remanufactured parts have been used throughout the year, which reduces the material consumption during the wind farm operation. The Company has also set up a Remanufacturing Training and Skill Assessment Center to provide developed technologies and testing equipment to upstream and downstream enterprises of the industry chain, stimulating suppliers to improve the quality of wind turbines and improving the utilization efficiency of stock assets of wind turbines, so as to drive the high-quality development of the wind power industry.



# Emissions and Waste Management

During wind turbine manufacturing, the Company generates relatively little waste, mainly comprising a small amount of hazardous waste and general solid waste. Hazardous waste mainly includes organic resins and organic solvents; solid waste includes solid packaging materials and general waste, and waste generated during the construction of wind farms.

The Company properly handles all types of waste and uses its environmental statistics system to monitor the amount of waste generated and

recycled by different facilities in strict compliance with the principles of sorting and recycling and centralized storage and processing. For general solid waste, the Company takes the approach of centralized management and recycling or it entrusts a third party for recycling and disposal. For hazardous waste, it formulates the Management System for Hazardous Chemicals to standardize the storage, custody and treatment of hazardous waste, reducing their adverse impact on the environment.



In 2020, the Company revised Goldwind Group Environmental Factors Identification and Management Control Procedure and Goldwind Group Wastewater, Waste Gas, Environmental Noise and Solid Waste Management System. On the basis of meeting the disposal requirements, the Company clarified the requirements for reducing waste and emissions and thus reducing or avoiding the environmental impact.



In April 2020, China published the revised Law on the Prevention and Control of Environmental Pollution by Solid Waste. The Company organized study sessions for all employees, further optimized the measures for solid waste management, and tracked and supervised the implementation of the new laws and regulations to ensure compliance.

## Emissions of Primary Waste

Category	2020	2019	2018
Hazardous waste <sup>1</sup> (ton)	103.74	103.21	38.20
Construction waste from wind farms (ton)	826.68	363.59	2,082.71

Note:<sup>1</sup>The hazardous waste includes HW06 organic solvents (such as waste paint) and HW13 organic resins (such as hardener and resin potting adhesive) produced in the manufacturing of wind turbines.

## Greenhouse Gas Emissions

Carbon emission category	Type of Energy	Overall emissions <sup>1</sup> (ton of CO <sub>2</sub> e)		
		2020	2019	2018
Category I	Gasoline, diesel, liquefied petroleum gas, natural gas	12,460.36	16,809.55	9,420.23
Category II	Electricity	127,771.73	112,074.12	64,788.85
Total		140,232.09	128,883.67	74,209.08

Note:<sup>1</sup>Refer to GHG Emissions Accounting Method & Reporting Guidance for Machinery & Equipment Manufacturers for calculation of greenhouse gas emissions. Emissions from purchased electricity for operation of overseas offices are not included.

## Density of Waste Generation and Greenhouse Gas Emissions

Indicator	Emission density		
	2020	2019	2018
Hazardous waste generated per WTG manufactured (ton/MW)	0.0082	0.0102	0.0063
CO2 emissions per RMB 10k revenue (ton CO <sub>2</sub> e/RMB 10k)	0.0249	0.0337	0.0258

Water is not used in the manufacturing process of wind turbines only for Goldwind general office use. The Goldwind Yizhuang Smart Park, the main global office of employees of Goldwind, is equipped with a sewage treatment system to treat the sewage produced in the park. The system treats 400 tons per day. After treatment, the sewage reaches Beijing Integrated Discharge Standard of Water Pollutants (DB11/307-2013) before entering the public sewage network; the water can be reused for plant watering and toilet flushing after reaching relevant requirements listed in the The Reuse of Urban Recycling Water – Water Quality Standard for Urban Miscellaneous Water Consumption (GB/T18920-2002). The recycled water meets the requirement of the Standards for Drinking Water Quality (GB 5749-2006). By 2020, the Company has recycled 32 percent of the water that has been used through sewage treatment systems.



◆ The Sewage Treatment System of Goldwind's Yizhuang Smart Park | Beijing, China

» Ambient Noise Control

Different levels of noises will be generated during the processes of wind turbine production, transportation, installation, and operation. The Company strictly abides by the Law on the Prevention and Control of Ambient Noise Pollution, the Emission Standard for Industrial Enterprises Noise at Boundary, and the Emission Standard of Environment Noise for Boundary of Construction Site, and other laws and regulations to mitigate noise pollution. It combines sound absorption and insulation techniques such as installing sonic panels in workshops, enclosing the plant to constrain noise pollution within the building during operation. As for transportation and installation, the Company chooses to operate in less populated areas and avoid nighttime construction whenever possible.

The Company adopts advanced wind turbine control strategies and optimization schemes of wind farm noise reduction to control noise from the machines itself. The nacelle cover features strong sound insulation and absorption, reducing generator noise. In addition, permanent magnet direct-drive technology is applied in the wind turbines, which eliminates most gear drive noises. The Company also reduces noise generated from the operation of wind turbines by installing trailing-edge serrations on the blades. Prior to installation of any wind farm, assessments are done by the Goldwind suitability teams to research and develop wind farm noise emission models to accurately calculate the noise level based on site factors and noise limit, thereby producing countermeasures and other solutions in order to reduce overall noise emission.

With years of experience in wind farm development, construction, operation and maintenance, and based on laws, regulations, standards and technical requirements regarding environmental protection, the Company gradually improves the environmental management system and protect the ecological environment of project sites during construction of wind farms. With the change of national and local new energy policies and reduction in the cost of new energy, the Company improves related ecological protection measures and solutions for the identified ecological and environmental factors, as well as learns about and implements national and local standards for ecological protection and restoration to ensure the compliance.

Ecological and Environmental Protection

Ecological and Environmental Management in the Whole Process of Wind Farm Construction

Design optimization and review

- The Company brings in professional personnel to review, check and improve the content regarding ecological and environmental protection in the project design documents.
- The Company brings in professional personnel to review, check and improve the content regarding ecological and environmental protection in the project design documents.
- The Company develops specific transportation plans, deploys vehicles from the plant close to the project site, and uses digital technology to make fine and precise design of transportation routes, thus optimizing transportation routes, reducing the transportation distance and minimizing vegetation removal.

Strengthen process control

- The Company adopts the dynamic control strategy, and sets timeliness rate of rectification, closed-loop rate and other evaluation indicators to strengthen process control.
- For the exposed surface formed by the excavation of roads and platforms, green restoration and ecological restoration are carried out to meet the requirements of "three simultaneous system of design, construction and delivery" for environmental protection and water and land conservation.
- The Company implements lean principles in ecological protection and ecological restoration, and carry out process control from multiple dimensions.

Perform final acceptance

- The Company performs digital final acceptance of environmental protection and water and land conservation of construction projects to improve the timeliness rate of acceptance;
- The Company carries out the acceptance strategy of "one project, one policy" according to the administrative jurisdiction, landscape, seasonality and other factors.
- The Company actively communicates and coordinates with local ecological environmental protection authorities to address problems.

Bird protection

The Company uses video analysis, thermal imaging, sound detection, radar detection, and other technologies to detect bird activities. The Company also adopts ultrasonic technology, high-power digital voice technology, lights, laser bird repelling technology and noise from shock waves to detect and drive birds away from wind farms.

Flickering light

According to the local solar elevation angle and the length and height of blades, the Company calculates the influence range of shadow and deploys devices to test the light and shadow effects to reduce the influence of flickering light through turbine rotational speed control and sector management.

Landscape impact

When selecting the location and planning the layout of wind turbines, the Company fully considers the features of the surrounding landscape and consults with the local community. The Company takes consideration of the planning and layout of local industries when building wind farms to reduce impact on the landscape. The turbines can be produced with customized coating. The Company produces colored wind turbines to promote the harmonious coexistence between industry, humanity and the environment.

In 2020, the Company innovated its management mechanism in ecological and environmental protection and it took the lead in drafting the Green Indicators for Evaluation of Wind Farms for organizations. The Company advocated the concept of "conservation, environmental protection, low carbon and health" based on laws, regulations, and normative standards to realize a low-carbon and environment-friendly operation for the life-cycle of Goldwind wind turbines. In addition, the Company took into account energy conservation and recycling of natural resources, further promoting the healthy and safe lives of employees at wind farms, and filling the gap of the green standard in the wind power industry. In October 2020, Niutouling Wind Farm of Tianrun, a subsidiary of the Company, was rated as the first 5-star green wind farm in China.

» Biodiversity

The Company has formulated and revised the *Sustainable Management Measures of Biological and Natural Resources* to clarify the requirements for biodiversity protection in the process of the development, construction, operation, and maintenance of wind farm projects. The Company defines protection and compensation plans by identifying and analyzing biodiversity risks of wind farms and surrounding habitats, particularly in areas rich in biological resources, aiming to mitigate and avert the impacts of wind power projects on plants and animals, as well as their habitats. The Company focuses on the impacts including bird collision, wildlife migration, habitat loss, and environmental pollution and aims to protect and preserve biodiversity by adjusting the number, size, and distribution of wind turbines, developing and applying bird repelling systems, banning the construction of artificial landscapes that attract birds and bats, and strictly implementing the *Management System of Environmental Protection and Conservation of Soil and Water*.

# 05

## Employees

Optimal Working environment and All-Round  
Talent Cultivation

Following a people-first principle, the Company always regards employees as an important source of sustainable development, and continuously innovates the employee management mechanism and talent training system, so as to provide employees with career promotion channels and development platforms as well as a safe, healthy and caring work environment, and facilitate the sustainable development of both employees and the Company.



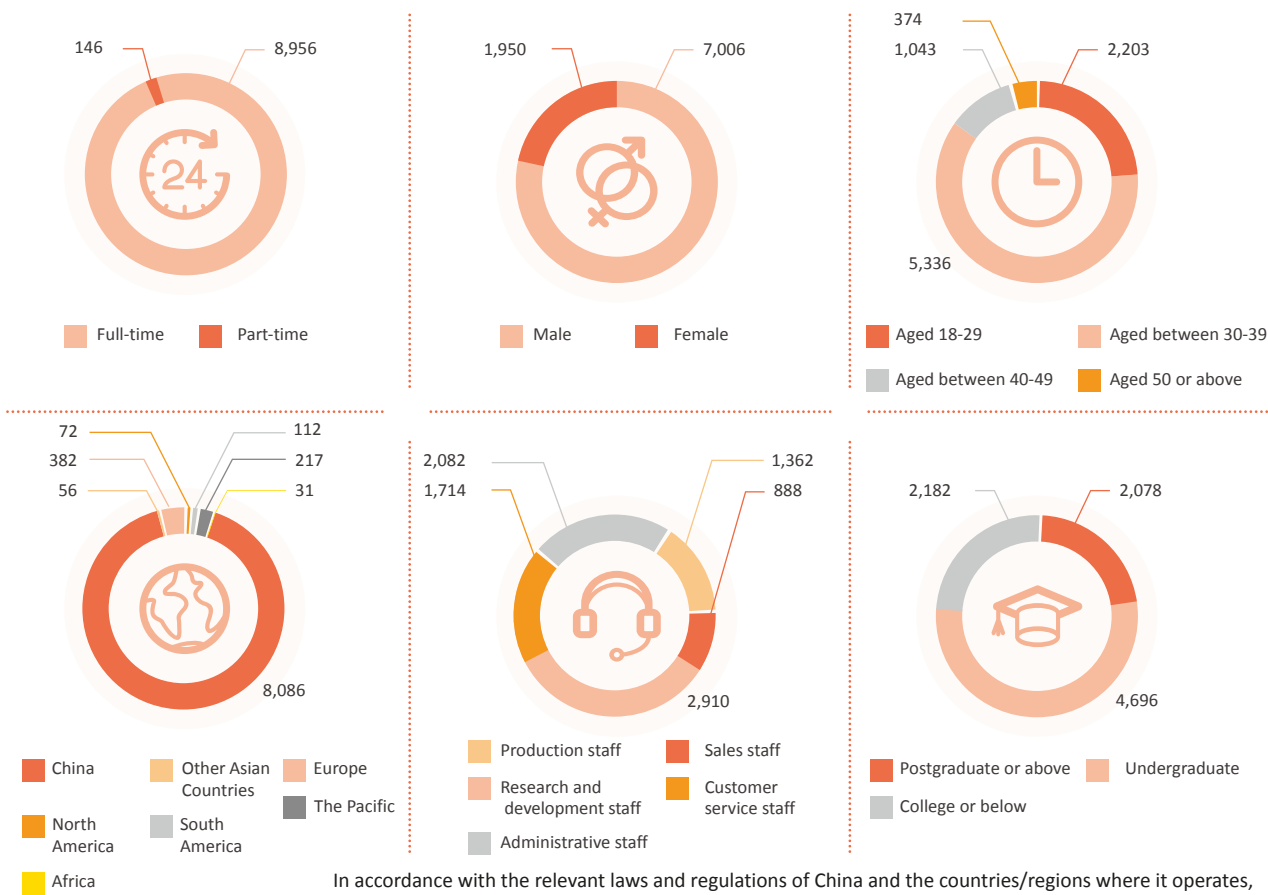


# Fair and Standard Employment

The Company strictly abides by China’s Labor Law, Labor Contract Law, and other policies and regulations, as well as the laws and regulations of the countries and regions where it operates overseas, and relevant international conventions approved by the Chinese government. It adheres to the equal employment principle, treating employees of different races, skin colors, ethnicities, genders, ages, religious beliefs and cultural backgrounds fairly and properly, and strictly prohibiting the use of any form of child labor, forced labor, bonded labor or the trafficking in persons throughout company operations. In 2020, the Company did not record child labor, forced labor, bonded labor and human trafficking.

In 2020, the Company formulated the Measures for Fair Management of Employees, which explicitly prohibits discrimination in gender, sexual orientation, ethnicity, skin color, religious beliefs, language, health, etc. It also set up a monitoring mechanism and accountability mechanisms for violations to ensure equal opportunities for employees in competition. Goldwind stipulated the Management Regulations against Child Labor clarifies procedures and measures to avoid the recruitment and employment of children. Goldwind adheres to its Code of Ethics and Business Conduct and Regulation on the Prohibition of Child Labor reaffirming the Company’s commitment to respecting human rights.

In 2020, in accordance with national laws and regulations on protecting personal information, the Company compiled and published the Guidelines for the Management of Goldwind Group Employee Information and Privacy Protection, established an management system of employee personal information and privacy protection, and clarified the principles and safety requirements for any activity by using employee’s personal information, so as to prevent illegal data collection, abuse or leakage, and safeguard the legitimate rights and interests of employees.



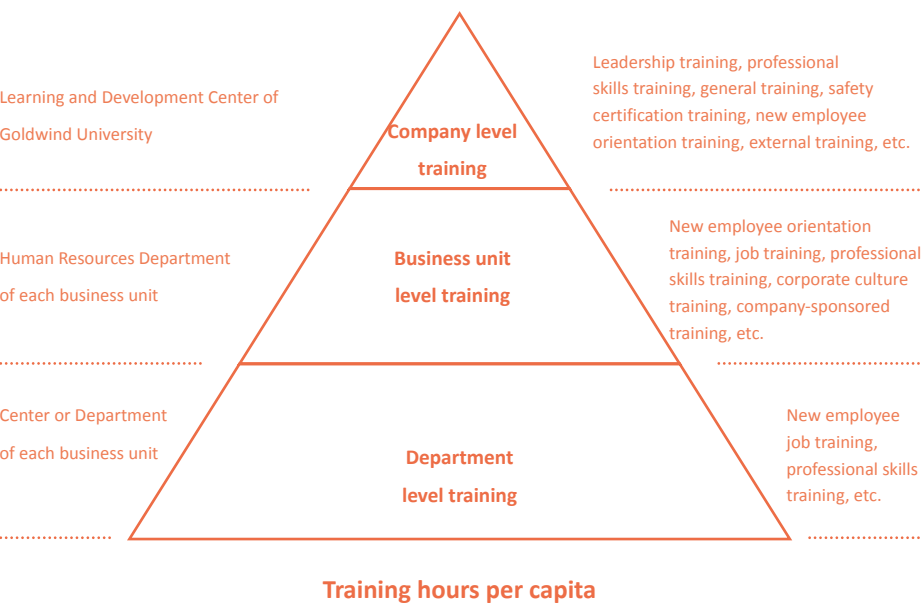
In accordance with the relevant laws and regulations of China and the countries/regions where it operates, and adhering to the principle of equal compensation for male and female employees, the Company obtains industry compensation information each year through competitors analysis, public government data analysis, third-party compensation reports, and internal research, thus establishing a salary system that balances external competitiveness and internal fairness to attract and retain top talent. The Company strictly implements national and local social security systems, pays the wages of employees in a timely manner, and pays China’s five social insurances and one housing funds in full, protecting the legitimate rights and interests of employees.

# Training and Development

## Employee Training

The Company has set up a comprehensive and multi-level talent training system to meet employees' needs for enhancing their expertise and basic vocational skills, and encourages them to choose the appropriate career development path according to their own professional plans, so as to fulfill their ambitions while promoting corporate development.

In order to provide systematic training courses and an exchange platform for employees, the Company founded Goldwind University in 2011 with the goal of cultivating outstanding new energy value creators. The Company makes full use of internal and external knowledge resources of the Company, and develops and introduces training courses suitable for the Company's current and future development so as to establish itself as a learning institute, enhance employees' capabilities, and cultivate talent for the development of the Company and the entire wind power industry. The Company follows the principle of position-related, input-output, division-based management and collaborative sharing, and established a three-tier training management system comprising Goldwind University, Human Resources Departments, and other training and technical departments. It takes fully into account the strategic planning and personalized growth needs of employees, and creates a diverse set of learning opportunities and platforms for employees based on different training goals and requirements.



32.31 hours

Training hours per capita

In order to facilitate employee development, the Company optimizes training methods and tools according to educational theories, establishes diversified and multi-level training programs, and takes multiple training approaches to facilitate an employee’s development. The Company provides funding and encourages employees to seek external training opportunities to fully meet their needs in the improvement of professional knowledge, vocational skills, and academic qualifications. In 2020, the Company made full use of both online and offline learning platforms to expand the coverage of training as well as broaden the range of training and enrich the learning content. Focusing on leadership and management capability development, transferable skill development, and talent cultivation at key milestones in their career, the Company carried out training activities in 9 categories such as coach training, legal and regulatory, digitalized skill development camp.

Empowerment Camp for New Managers

The Company carried out the leadership program titled, "Reviewing the Hongsong Project—Empowerment Camp for New Managers". Adhering to the principle of combining theory with practice, the trainees visited the site of Goldwind's historic Hongsong wind farm to learn about the Company's history and culture. To help employees overcome key challenges such as role change and team management, an all-encompassing management course was put in place to improve new managers' professional skills and team management skills. The Empowerment Camp is held twice per year, training 53 employees. In 2020, the Empowerment Camp won the award of "Best Learning Project" in the 11th Annual China Talent Development Awards.

Hundred Talents Project

Since 2015, the Company has started to implement the "Hundred Talents Project" training program by adopting a dual-way training with external universities and Goldwind University. The main part of the training is completed in external universities where employees learn specialized knowledge and take degree/diploma courses, supplemented by the internal courses offered by Goldwind University, so as to improve the educational background, specialized knowledge and professional skills of employees at key posts. By the end of 2020, a total of 198 employees has participated in the "Hundred Talents Project".

G+ Oscar Teamwork Talent Development Program

For employees like front-line managers, the program involves real work scenarios based on in-depth training and practical tasks to help the team establish a vision, promote teamwork, solve problems at work and improve team performance through reading tasks, workshops, and practical sessions. There were three sessions of the program in 2020, with 14 teams and a total of 116 people trained.



Goldwind University training rooms

Employee Development

The Company has established two channels for job promotion, namely management and specialty channels to cultivate outstanding talent in various professional fields so that the direction of employees' career development is consistent with that of the development of the Company. The Company analyzes the subjective and objective factors of employees' career development, encourages employees to make plans on their personal and career development to ensure that every employee's career development goal is consistent with the strategic development goal of the Company. The program further helps employees achieve their career development goals by providing opportunities such as the training, job rotation, and intra-company transfer.

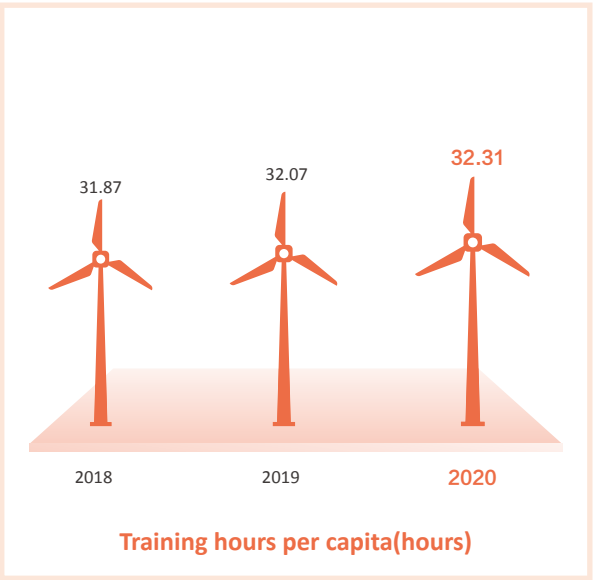
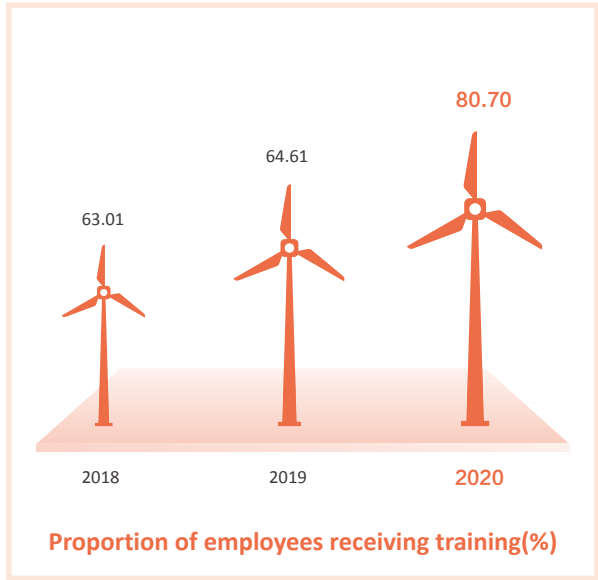
The Company establishes both vertical and horizontal career development paths for its employees. Based on the two career development channels, the vertical career development path helps employees get promotion in either specialty area or management through job qualification assessment. Employees can also enrich and expand their professional experience through secondment, job rotation and transfer and thus achieve horizontal career development. The specialty channel is divided into seven major categories and 40 sub-categories, and six vertical levels offering a variety of career development paths for employees.

Health and Safety

The Company continues to optimize its safety management system; based on safety technology enhancement, safety culture shaping, safety informatization, and high risk governance of occupational health and safety, the company promotes the close integration of safety system building and business development, so as to build an intrinsically safe enterprise.

In 2020, in the face of the sudden outbreak of COVID-19 pandemic, the Company immediately released an emergency response scheme, established a leading emergency working group headed by the Chairman of the Board and the President of the Company, set up a standard procedure of emergency response, and carried out pandemic prevention and control. The Company invested RMB 10 million of special funds for epidemic prevention and control, formulated and timely adjusted the scientific epidemic prevention system in accordance with domestic and foreign epidemic prevention situations, as well as uniformly deployed and implemented epidemic prevention measures at the Company

headquarters and global subsidiaries; the Company took epidemic prevention measures for scenarios including entering the park, working, catering and commuting, set up isolation observation areas, checked for close contacts, checked the body temperature, and implemented regular disinfection of offices. Infrared thermometers were placed at the entrances and exits of offices, and disposable medical masks, disinfectant hand sanitizers, disinfectant paper towels, medical alcohol and other resources were placed in public areas; a health information monitoring system was established to dynamically track the health information of all employees on a daily basis; internal mail, WeChat group and other communication tools were used to popularize knowledge and share updates about the pandemic to employees. The Company took the initiative to normalize pandemic prevention and control, so as to ensure the health and safety of employees, and facilitate the safe production. In 2020, the Company achieved the goal of "zero infection and zero transmission" for the prevention and control of the COVID-19 epidemic.



»» Production Safety

0

occupation-related casualties

While normalizing pandemic prevention and control, the Company continues to optimize the occupational health and safety management system; by establishing the KPI system of safety environment and occupational health, and the integrated HSE system list of horizontal business units and vertical professional classification, the Company continues to promote comprehensive standardization of safety production and HSE performance evaluation and supervision at all levels, implements the identification and handling of high-risk hazards, so as to strengthen the management of production safety, prevent potential harms to employees in production operations and completely prevent all major safety accidents. In 2020, The Company did not record any occupation-related casualties and a total of 218 working days loss was caused by occupational injuries.

Enhance Safety Technology

In 2020, the Company developed and applied the safety tools management digital platform, the smart park emergency command and scheduling system, the construction VR safety education and training platform, the integrated supplier HSE management platform and other safety technology projects. The approaches for safety management were enriched to improve production safety management in an all-round way.

For on-site inspections for safety risks, the Company employs drones to help engineers learn about the overall situation of the site and quickly identify safety risk factors on wind farms. For areas with complex environment that is

difficult for manual survey, drones are used as a convenient and efficient way to obtain high-resolution videos, images, 3D modeling of the site and other data to assist engineers to identify risks in time as well as reduce the intensity and the safety risks of manual survey. The "Smart Park Emergency Command and Scheduling System" integrates emergency information collection, accident location, plan management, auxiliary decision-making, command and scheduling and other functions through information management technology, so as to provide real-time and reliable analysis methods and the basis of decision-making for handling major emergency events.

Shape a Safety Culture

In accordance with *Safety Production Law, Basic Specification for Enterprise Safety Production Standardization (GB/T33000-2016)*, the Company has improved the assessment standards of safety production standardization based on its production, and established assessment standard list based on the various business forms of Goldwind. In 2020, based on the original eight assessment elements, the company increased the requirements of safety culture construction, including seven dimensions of safety instructions and incentives, safety participation, and leadership and management behavior, and continuously optimized the content of the Company's safety production standardization construction, thus establishing its own assessment standards of safety production standardization.

The Company promotes the transition of safety management from a system-based one to a culture-based one, so as to allow employees to take the initiative to participate in safety issues, form the safety culture that all employees abide by, motivate employees by using the safety culture, and make up for anything insufficient in

the existing approaches of safety management. The Company has set up safety culture awards, pilot safety culture units and other incentives and means to motivate employees to participate in safety culture activities; Through publicity, training sessions, rewards and punishments, and image and logo design related to safety, the Company summarizes characteristics of the Company's safety culture, and promotes safety culture among employees, thus ensuring that employees act according to the safety rules. In 2020, the Company won the title of *Beijing Safety Culture Construction Demonstration Enterprise*.

In 2020, tested by the pandemic, the Company held safety activities in the front line of production on wind farms and turbine factories. The Company held experience-based visualized activities in a dispersed, socially distanced approach. The activities included simulated damage experience, VR experience for fire control, safety knowledge sharing with family members, group discussions on safety issues and brainstorming for safety measures, to cultivate and enhance employees' awareness of safety culture.

Safety of Interested Parties

The Company regards the safety of relevant parties as an integral part of production safety. In 2020, based on the collaborative supply chain management system, the Company built the supplier HSE management platform and integrated the HSE evaluation of 29 key material suppliers into the information management process. The Company incorporated safety awareness training of logistics and transportation suppliers by providing weekly and monthly

safety training that covered accident case warning, safety emergency management, and other related topics. Transportation drivers were informed of the requirements regarding safety through the implementation of safety notification boards and training cards. A total of 50 issues and 208 editions of safety training cards were offered to more than 20,000 persons over the year.

Offshore Wind Power Safety

The Company always considers production safety as a top priority while developing offshore wind power and continuously improves the safety management and emergency support for offshore wind power. In 2020, the Company introduced the basic safety training module of the Global Wind Organization (GWO), and cooperated with the Maritime Safety Administration to develop compulsory and practical training courses covering marine survival, first aid and fire control for offshore operators. The Company's offshore survival training platform helps employees enhance awareness through practice and scenario-based experiences as well as mastering the knowledge and skills of safety on offshore platforms through the simulation of the harsh conditions of the open sea.

The Company constantly enhances the resources and capacity for emergency response. It organizes regular emergency drills to train offshore survival skills and high-altitude evacuation skills, and strengthens its capability of providing maritime emergency support by using the survival pool and tower at the offshore training center and offshore wind farms under construction. In August 2020, the Company introduced sea rescue helicopters to emergency drills and set up a "lifeline in the air" for offshore wind farm operators. The Company also provides individual positioning beacons for each employee engaged in offshore wind power operations to effectively aid in the rescue of personnel after accidentally falling overboard.

»» Occupational Health

The Company attaches great importance to the physical and mental health of every employee, thus formulating the Guidelines for Employee Health and Occupational Disease Prevention, and setting up detailed occupational health records and employee health monitoring files. The Company also evaluates the risk factors of occupational diseases and examines hazards on a regular basis. When signing labor contracts with employees, the Company informs them of the risk factors of the positions in advance, and strengthens occupational health and safety education and training during the induction training of new employees.

The Company takes protective measures against occupational disease hazards, provides employees with professional and special personal protective gear, puts warning labels and instructions in conspicuous places for equipment and chemical materials that may induce occupational risk, and regularly checks and repairs protective facilities and equipment. The Company has released the Employee Health Standard to improve employees' awareness of their own health management and help them master and adopt scientific methods and tools for managing their personal wellbeing. For employees working in special environments such as high-altitude regions or an offshore environment, the Company customizes the physical examination which focuses on cardiovascular and cerebrovascular diseases and rheumatism diseases. The participation rate of employees in physical examination is 100 percent. The Company pays great attention to the mental health of employees, and carries out programs such as mental health consultation, mental health examination, and online mental health classes.



## Employee Care

### » Communication and Exchange with Employees

The Company has an open and transparent internal communication mechanism, shapes a harmonious communication atmosphere, and continuously optimizes the work environment to enhance employees' cohesion and sense of belonging in the Goldwind community.

The Company advocates an open and transparent work environment for employees so that employees can learn about the Company's business scope and current development as much as possible. The Company listens to the opinions and suggestions of employees to improve corporate management as well as to understand and meet the reasonable needs of employees. Through planning and implementation of employee surveys, quarterly employee meetings and thematic roundtable discussions, front-line employee care, and IP activities, the Company opens up two-way communication channels and operational mechanisms while constantly improving its transparency. The Company designs satisfaction survey models and questionnaires, and carries out the survey projects among all employees, being committed to continuously improving the overall satisfaction of employees.

### » Work-Life Balance

Goldwind encourages its employees to balance their professional and personal lives through Goldwind-sponsored programs and benefits. By providing sports facilities, venues and coaches, the Company provides opportunities and favorable conditions for employees to develop interests, cultivate hobbies and learn new skills, and regularly holds a variety of cultural and sports activities to encourage employees to work efficiently and live happily. In 2020, due to the pandemic, the Company produced and launched "Goldwind Sports Online Courses" that encouraged virtual and solo sports including badminton, table tennis, basketball, health and art to help employees exercise while working at home.

#### Diverse Sports Venues

The Company at its Beijing headquarters hosts a football field, basketball court, badminton court, tennis court, swimming pool, rock climbing area, table tennis court, a fully-equipped gym and other sports venues to meet the needs of various sports interests of employees.

#### Sports Clubs with Professional Coaches

The Company has more than ten employee clubs on sports and art, such as badminton, basketball, table tennis, yoga, swimming, shuttlecock kicking, chorus, and piano. Goldwind also employs retired national athletes and professional coaches to help employees exercise properly and in a scientific way that enhances personal and professional productivity.

#### A Variety of Sports Events and Cultural Activities

The Company holds competitions on sports such as football, badminton, table tennis, basketball, and triathlons. Goldwind also hosts a prime time music festival and encourages employees to actively participate in these activities to enrich their lives. The Company held various sports competitions throughout the year with more than 20,000 times of employees' participation.

#### Hold Family Open Day for Employees

The Company holds the Family Open Day, inviting employees' family members to visit the offices and learn about employees' work environment and the Company's development. In 2020, the Family Open Day was held twice which welcomed 1,030 employees and their family members.



### » Employee Welfare

The Company is committed to providing employees with a full range of services. Based on employees' needs, the Company implements "Quality Project 2.0" and "Shared Service Plus Plan" to continue to improve the quality and level of services, enhance employee experience, and meet the diverse needs of employees.

While most services and welfare options are available globally, most localized options are only available at Goldwind in the People's Republic of China.



#### Healthcare:

- Allocate emergency medical supplies, increase the types of emergency first aid kits, and add stretcher beds/transport chairs, defibrillators and other equipment;
- Publicize information about health management and carry out two health-themed lectures throughout the year;
- Cooperate with colleges and universities to develop physical exercises for offices with the functions of preventing myocardial and cerebral infarction and activating lymph nodes, and popularize and promote the exercises within the Company;
- Add a health package to employees' benefits and welfare;
- Provide customized commercial insurance plans and hospital registration services for employees and their families.



#### Diet:

- Provide free nutritious lunches with balanced diets to ensure the sufficient nutrition;
- Organize food festivals and invite employees to taste different cuisines.



#### Accommodation:

- Make reasonable arrangement of employee dormitories, strive for public rental housing resources, and promote the boutique apartments, so as to meet the accommodation needs of employees.



#### Commute:

- Based on services available in the market and self-service systems, the Company makes use of Didi Enterprise Solutions, Ctrip Corporate Travel and other services to facilitate employees' business trips;
- Deploy smart commuter cars to meet employees' commuting needs.



#### Residential Facilities:

- Introduce barber's shops, dry cleaning shops, supermarkets, cafes, etc. to enrich services within the park and facilitate the work and life of employees;
- Promote "street vendor economy" to attract high-quality merchants to provide supporting services for the park.

The Company cares for employees with special needs. It allows on-site employees who have worked for a certain number of years to visit family and it also gives out welfare packages and pays visits to front-line employees; the Company helps employees in need of money by the means of company contribution, salary payment in advance and employees' donation.

# 06

## Green Supply Chain

A Win-Win Cooperation For the Industry

Goldwind is a leading manufacturer of wind turbine components worldwide. Since its establishment, the Company has formed a fine tradition of working closely with suppliers, adhered to good moral and business ethics, and has performed and grown its business in a fair way. While protecting the legitimate rights and interests of suppliers, Goldwind supports the growth of suppliers and uses its role as a wind power leader to drive suppliers in their own social responsibility and supports them in building a sustainable industry chain for the entire wind power industry.



Procurement

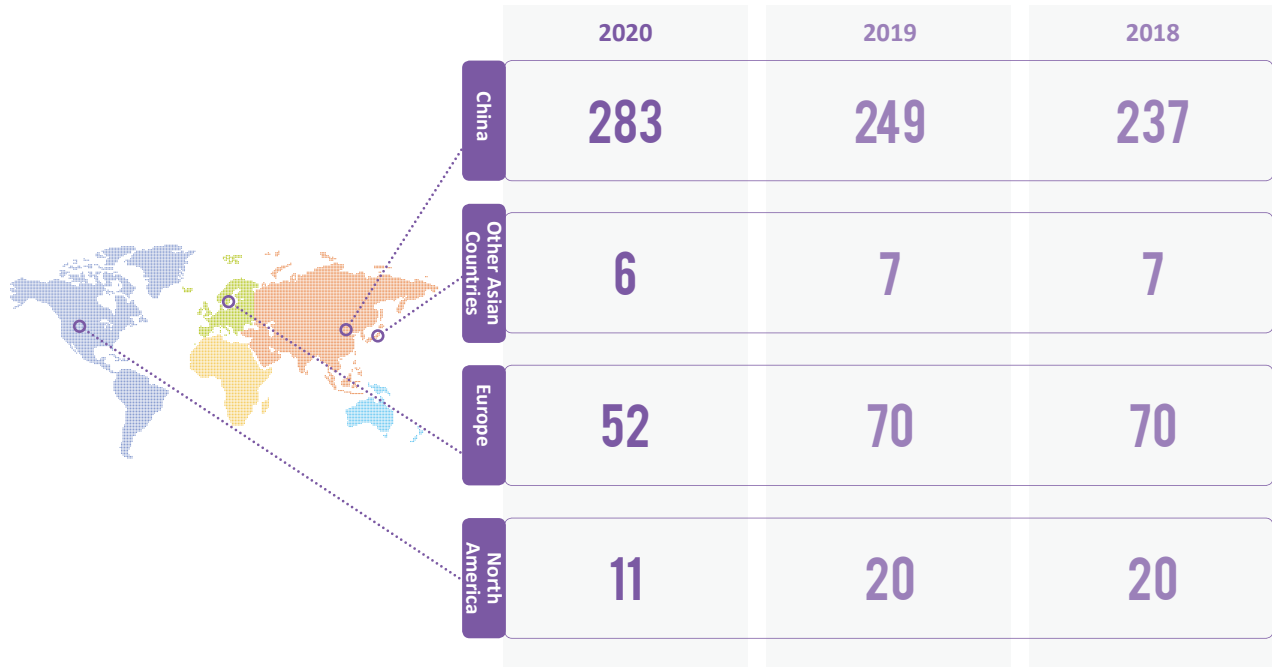
The Company complies with the ideal of transparency and compliance and the principle of fair, just, and open procurement. It has formulated regulations such as the Guidelines for Goldwind Group Procurement Management and Goldwind Group Procurement Management Regulation, which clarify the responsibilities of various departments including the procurement, technical, auditing, and legal department. The Regulation also specifies the procurement process and supplier management requirements to ensure compliance during procurement, improve management efficiency, and reduce procurement risk.

The Company has established a supply chain collaboration platform as a unified portal for communication and collaboration with suppliers. It integrates such functions as online information exchange, procurement order coordination, and digital contract management. All procurement processes are recorded and managed online to ensure fairness and transparency. Suppliers can access the platform by registering accounts, and in the system, they can maintain basic informa-

tion, confirm orders, and search for payment details and other information. The platform enables full access of suppliers to procurement management information, so that compliance in the procurement process can be better supervised and managed.

The Company releases the procurement bidding process to the public and sets reasonable procurement prices. It makes payments according to what is agreed upon in contracts and safeguards the legitimate rights and interests of suppliers. To prevent corruption and bribery in the procurement process, the Company has released the supply chain regulation documents on the home page of the e-commerce website, such as the Sunshine Procurement Pledge and Goldwind Group Procurement Management Regulation. The Sunshine Cooperation Agreement will be a must-sign procurement contract, requiring the Company to demand suppliers to maintain professional integrity, to prevent commercial bribery, and to promote healthy and well-organized partnerships with suppliers.

Number of Suppliers by Region<sup>1</sup>



Note:<sup>1</sup>The number of qualified suppliers who provide components, production and services, tools, equipment, packaging, and other raw materials and services in accordance with the Administrative Measures for Development of Wind Turbine Component Suppliers.

The Company attaches great importance to the compliance and sustainability in supply chain management. The Company introduces social responsibility to supplier management, requires suppliers to comply with applicable laws, regulations and codes of conduct, and guides suppliers to fulfill their social responsibilities to reduce the environmental and social risks in the supply chain. In 2020, in accordance with ISO 26000, ISO 18001, ISO 14001, ISO 45001, SA8000, and other international standards and guidelines, the Company optimized the *Supplier Social Responsibility Code of Conduct*, and clarified the requirements on social responsibility behaviors in terms of abidance by governing laws, labor rights

and human rights, health and safety, environment, business ethics, procurement management and management systems. The Company includes compliance with the code of conduct in business contracts, and requires the production process, products and services of suppliers to comply with national laws, regulations and standards regarding environmental and occupational health and safety. The Company encourages suppliers to develop and use safe and environment-friendly products and services, and takes effective measures to reduce risks in the context of social responsibility arising from the transportation and installation of components and long-term equipment operation.

Main Content of Suppliers' Code of Conduct

Governing laws	Complying with all laws and regulations of applicable legal systems
Labor rights and human rights	Free choice of employment, non-discrimination, anti-harassment and abuse, individual rights, non-use of child labor, working hours, wages and benefits, freedom of association and collective bargaining, appeal, etc.
Health and safety	Working conditions, living conditions, emergency preparedness and response, etc.
Environment	Pollutant emission permit and report, environment-friendly products, prevention of environmental pollution, energy conservation and emission reduction, environmental management system, etc.
Business ethics	Integrity, information disclosure, protection of intellectual property rights, whistleblower protection and anonymous complaints, etc.

In 2020, the Company improved the *Administrative Measures for Qualified Suppliers of Wind Turbine Components*, and included *social responsibility* in the comprehensive evaluation of the performance and capability of suppliers together with other dimensions such as quality, delivery, technology, and service. The Company evaluates the social responsibility performance of suppliers quarterly and annually through self-inspection by suppliers and spot checks by the Company. The evaluation results will determine the ranks of suppliers. The Company will urge ill-performing suppliers to improve within a defined time limit and suspend their supply qualification during an evaluation period. The Company has set up a supplier social responsibility evaluation system that covers five aspects including the rights and interests of workers, health and safety, environment, business ethics, and

management systems. The Company conducted social responsibility assessment evaluation in 15 key suppliers from four categories of suppliers including generators, blades, casting, and magnetic steel, among which 13 suppliers were rated as excellent, two suppliers rated as good.

In order to enhance suppliers' social responsibility awareness and capability, in June 2020, the Company held a meeting to promote and implement social responsibility in suppliers. During that meeting the Company briefed the main administrative measures, routes, and goals of Goldwind's supplier social responsibility management and explained the *Supplier Social Responsibility Code of Conduct*, the Company's social responsibility evaluation system, and the supervision mechanism, among other key items. A total of more than 250 suppliers participated in the meeting.



# Green Supply Chain

The Company is an R&D and manufacturing enterprise focusing on wind power equipment. Its energy and waste emissions during the production process is small compared with the aggregate impact of the entire wind power industry chain. In addition, wind turbines produce almost no pollution during operation and power generation, and most of the resource consumption and emissions take place in the enterprises from the upstream of the supply chain. The Company has taken the lead in the industry in putting forward the concept of green supply chain and systematic solutions to help suppliers improve their environmental protection performance, reduce environmental risks, and build a sustainable wind power industry chain.

After years of system development, the Company has established the green supply chain information management platform, integrating multiple energy conservation and environmental protection systems such as energy efficiency

management, sewage discharge management, solid waste management, air quality monitoring management, and green materials management to build a comprehensive environmental information management platform for suppliers. The Company offers energy conservation and environmental protection technologies such as energy-saving transformation, waste-heat utilization and smart control, and provides suppliers with services including project design, construction, equipment installation and testing, personnel training, and other services. The Company spreads the concept of green supply chain to the downstream of the wind power industry. By integrating the smart service cloud platform and the remanufacturing testing platform, the Company innovates and transforms key green technologies, and forms a green supply chain management platform throughout the whole life cycle of wind power equipment including design, procurement, production, logistics, operation, and remanufacturing.

## Main Evaluation Indicators of Green Suppliers

 Green Design	Green Product Design
 Green Procurement	Procurement Information Management
 Green Production	Hazardous substance management, compliance with governing laws and regulations, specially-assigned staff, pledges of relevant parties, occupational health and safety management, environmental management, energy management, energy efficiency platform development, use of green power, energy conservation management, and greenhouse gas emission management
 Green Delivery	Transportation management and packaging management

The Company has developed differentiated evaluation standards based on different industries where suppliers belong, and formed the Guidelines for Goldwind Green Supplier Evaluation to continuously optimize green environmental performance of suppliers. In 2020, the Company continued to carry out green supplier evaluation on more than 80 core component suppliers. Through document review and field evaluation, the Company comprehensively evaluated the suppliers in four dimensions including green design, green procurement, green production, and green delivery. A total of 27 suppliers, including eight Level 5 suppliers and 19 Level 4 suppliers, won the title of Green Supplier. In October 2020, the Company held the event, Leading Green Wind Power: Goldwind Green Supply Chain Project Achievement Announcement Conference 2020 at China Wind Power 2020 (CWP 2020) to commend

outstanding green enterprises in the supply chain.

Through a joint effort between the Company and suppliers, the number of green suppliers increases year by year with better overall green performance of suppliers in the supply chain. In 2020, the Anyang branch of Xi'an Jieli Electric Power Electronic Technology Co., Ltd. fully upgraded the rotor sandblasting process, and replaced all solvent-based enamel paint with environment-friendly solvent-free high-build resin paint to reduce the generation of pollutants. Jiangsu CRRC Electric Co., Ltd. changed the stator impregnation paint from common insulating paint to environment-friendly insulating paint in batches, and installed a new sewage management system to continuously explore its capability in environmental protection and improve its environmental performance.



◆ Conference for granting certificates of Level 5 suppliers



◆ Chairman of the Board Wu Gang delivered a keynote speech

# Win-Win Cooperation

As one of the earliest wind power equipment manufacturers in China, Goldwind has worked together with suppliers, innovated itself, and made constant progress, constantly optimized the quality and performance of wind turbines, and thus established a stable symbiotic relationship of common prosperity during the course of development of the entire wind power industry. The Company works with its suppliers to develop new technologies, exchange industry developments, share market opportunities and risks, complement each other for joint development, and achieve sustainable development together.

At the beginning of 2020, in the face of the sudden outbreak of COVID-19, the Company cooperated with suppliers on a joint response to the pandemic. In order to resume work in an orderly, safe manner, and continue the stable supply of wind turbines under strict virus prevention measures, the Company and its suppliers jointly investigated the impact of virus prevention and control on the supply of raw materials, workshop production, and logistics and transportation. Each kept in close contact to analyze the changing situations of personnel, materials, transportation, and cash flow to ensure a smooth information exchange and swift coordination. The Company also assisted suppliers with the preparation of virus prevention supplies to protect employees' safety before finally resuming work in a safe and orderly manner.

With the resource advantages gained during the long course of development of the wind power industry, the Company carries out relevant training, cross-business exchanges, learning and visiting activities, and builds a platform for

common progress with suppliers – supporting and guiding these suppliers to improve their technology and management. In 2020, the Company held the welding skills competition for suppliers of structural parts to build a platform for suppliers to compete by using their welding skills, knowledge and experience, but also to help suppliers improve their welding quality. In order to enable new suppliers to quickly understand the quality-oriented culture and quality management requirements of Goldwind, the Company held a quality training camp for 35 new suppliers to promote their rapid integration into the Goldwind industry chain. With the continuous development of offshore wind power, the requirements for the quality and reliability of wind turbines has been significantly enhanced. The Company invited the executives of supplier companies to participate in offshore quality experience activities to provide an opportunity to experience the operating environment of offshore wind turbines directly on the site.

Since 2017, Goldwind has introduced the quality assurance methodology of APQP4Wind, exploring and promoting its use in the Company and enterprises within the supply chain. In 2020, the Company cooperated with internationally renowned third-party training companies to facilitate personnel capacity building for key suppliers, formulated key component quality standards, and compiled management regulations and manuals. Apart from improving the quality management of suppliers, the Company has enhanced its performance in key indicators such as the first-success rate of new product development, the pass rate of first-piece quality acceptance, and the pass rate of key components upon arrival.

# 07

## Community and Public benefit

Be the Global Corporate Citizen and Support  
Community Development Wholeheartedly

While developing business operations, Goldwind manages and protects local natural and social resources in a sustainable manner, and makes use of our business advantages and resources to improve the lives of residents in surrounding communities.





## Community Development

Our corporate social responsibility goes wherever we go. Goldwind complies with relevant local laws and regulations, respects local culture and customs, takes the initiative to communicate with local residents, and maintains a good relationship with local communities.

In the process of domestic wind power development and construction, the Company has compiled *the Environmental and Social Risk Assessment and Action Planning Management Measures, Measures for the Administration of Cultural Heritage, Measures for the Administration of Ethnic Minority Affairs, and Measures for Stakeholder Consultation and Participation Management*, identified the impact of business operation on the community, and established communication and participation mechanisms among community residents, government agencies, and other stakeholders.

**Where Goldwind has offices**, we invite community residents, suppliers, regulatory authorities, and other stakeholders to visit our workshops, project showcase, and industrial park facilities introduce them to our production and operation activities.

**At the wind farms**, through communication with local residents, we disclose the latest progress of the wind projects, and collect, discuss, and respond to issues that are of great concern to surrounding communities.

**At Goldwind international locations**, we dedicate specific positions such as community relations or asset manager to coordinate and conduct community development related activities.

The Company sees itself as part of the community, and integrates its own development into the local economic and social development to jointly promote the prosperity of that community. From tax revenue to payments for local services, the economic benefits of Goldwind wind projects go beyond providing clean energy. The Company takes localization as its fundamental principle for global business operations, and hires as many local employees as possible. The local employment rate of the regional centers in Australia and North America is 100%.

During the project construction, the Company takes the initiative to help improve the lives of residents in local communities and its residents. Most of the wind farm projects are located in remote areas where critical infrastructure is often overlooked or in much need of repair. When the Company builds the access roads for wind turbines, it takes into account the needs of community residents in the planning stage and builds roads and bridges that support the wind project, but long-term serve the community. In the areas with drastic rain seasons, the Company takes the initiative to build flood discharge channels to guarantee the safety of downstream villages by mitigating the impact of flooding.



- ◆ The wind power project of Guangxi Tiandeng carried out the color printing of the Zhuang ethnic culture on all wind turbines and blades, and cooperates with the local government to turn the wind farm into a tourist attraction.



- ◆ In the wind turbine site selection stage of Sichuan Panzhihua wind power project, the Company took the initiative to stay away from local cultural relics such as the famous historical and cultural village of Yishala, the ancient trenches and ancient battlefield sites of Yingpanshan.

As an enterprise specialized in clean energy, energy conservation and environmental protection, the Company utilizes its accumulated business resources and experiences to participate in and support community development, and also share the results of corporate development with the community, so as to support the economic and social development of the community where the company operates. In 2020, affected by the pandemic, the Company mainly worked with the poverty alleviation offices in many regions, investigated and visited poor families, formulated poverty alleviation programs, and systematically planned the assistance work. More than 20 families have been helped to improve their living conditions in poverty-stricken regions.

## Education

Goldwind focuses on supporting education and the global development of wind power technology. It strives to support education development by helping poor students go to school, donating teaching materials, improving educational facilities, training rural teachers, and cultivating wind power talent.

In 2020, the Company helped schools, teachers and students in Kashgar Prefecture and Hotan Prefecture in Xinjiang, Zhangjiakou in Hebei, Yancheng in Jiangsu, and other places. More than RMB 1.19 million has been invested to buy teaching materials and promote environmental education at a local level.

In 2020, the company created *Our Wind Energy*, a children's science picture book, to help children to learn about the wind energy, wind power, and renewable energy, while inheriting excellent national and family traditions.



- ◆ Cover of children's science picture book

### » "Wind for the Future" project

In August 2020, the Company organized the fifth Goldwind Across China charitable rural teacher training program. Due to the COVID-19 pandemic, the Company, together with the Goldwind Public Welfare Foundation and the Education Foundation of Beijing Normal University, held a one-week training in the form of live streaming with the combination of large group lectures, small group guidance, and extended learning in online self-study room. Fourteen first-line senior education experts were invited to introduce advanced teaching concepts, successful teaching cases and practical teaching methods to rural teachers under different learning scenarios. A total of 246 rural teachers from 17 provinces, 11 ethnic groups and 112 schools received the course training to enhance their teaching skills and broaden knowledge horizons.

RMB 6.07 million

Total annual charity donations



- ◆ Rural teachers participated in online training

Education can enlighten children to follow their dreams and improve their cognition. Our hope is that you can bring what you have learned to your hometown and apply it to your own teaching practices, so you can provide better development concepts and make greater contributions to rural revitalization. We also hope you can keep up your enthusiasm and confidence to help rural children realize their dreams.

— Wu Gang, Founder of Goldwind Public Welfare Foundation and Chairman of the Board of Goldwind



## » Popular science projects for youth

The Company has developed popular science products and activities themed on clean energy, energy conservation and environmental protection, and set up a curriculum system covering K-12 education in fields such as wind power, environmental protection, intelligent agriculture, and sports. The popular science learning activities have been carried out to inspire the interests in new energy and environmental protection among young people through non-profit research and study, "Goldwind on Campus" technology week, new energy innovation education classrooms, and other programs. In 2020, the Company developed three standard courses, two popular science books, and organized more than 600 teenagers to participate in science learning activities.



## » "Run for Tracks" Program

The Goldwind Public Welfare Foundation and Goldwind Runner's Club jointly launched a charity program named "Run for Tracks", in which Goldwind would match the donation for the number of kilometers accomplished by the members of the Runner's Club within a designated time. The Goldwind Public Welfare Foundation donates one-for-one, RMB 1 for one kilometer accomplished by the members of the Runner's Club. All the funds were used to build a plastic track in Nansai Central Primary School in Neiqiu County, Xingtai of Hebei Province. More than 300 members of the Runner's Club participated in this public welfare activity virtually and in-person, and achieved 42,536 km of running. In September 2020, with the support of the Goldwind Public Welfare Foundation, the Company built a 200-meter plastic track for Nansai Central Primary School.



◆ "Run for Tracks" Program

## Public Health

In 2020, facing the COVID-19 global pandemic, the Company made fully available its global business network resources, and immediately donated cash and medical supplies to Hubei, Xinjiang, Beijing, Hebei, the United States, Australia, and other regions. In addition, the Company actively performed social responsibilities and cooperated with the government in the prevention and control of the pandemic.

When the pandemic broke out, the Company immediately established Goldwind Pandemic Prevention Social Assistance Team, and donated RMB 400,000 to Hubei Charity Federation through the Goldwind Public Welfare Foundation to support the purchase of medical supplies and assist Hubei in fighting and preventing the spread of the pandemic. In addition to supporting the front line personnel, the Company worked with global contacts to purchase pandemic prevention materials in short supply, and provided financial and material assistance to communities around the Company's wind farms and sewage treatment plants. In February 2020, the Company donated RMB 630,000 in funds to Guangshui, Anlu, and Taohuashan region in Hubei. Medical protective clothing, protective gloves, and goggles were donated to Xiaogan, Guangshui, Anlu, Jingzhou and other places in Hubei, with a value of more than RMB 445,000. Meanwhile, in February 2020, the Company launched an online public welfare fundraising project, "Aid the pandemic areas to overcome difficulties", to call on all Goldwind employees to fight against the pandemic with public welfare donations. A total of more than RMB 3.95 million was raised in less than 30 days. The funds were directed to support the pandemic prevention and control in Xinjiang, Hubei, Beijing, Hebei and other regions supported by the Goldwind Public Welfare Foundation.

## Voluntary Services

# 1,573

The number of volunteers

# 8,600

Volunteers served hours

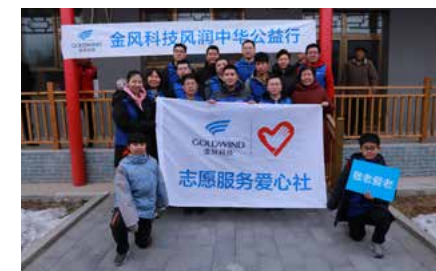


By the end of February, 2020, as the pandemic spread around the world, the Company founded an international pandemic task force to actively share experience in pandemic prevention and donate emergency supplies to regions where overseas projects and suppliers are located. The Company donated medical masks and other medical materials to Korea, Italy, Brazil, Ecuador, Spain, Romania and Pakistan to help them fight against the pandemic.

In order to improve the public health condition in rural areas, the Company has actively carried out the rural toilet renovation and upgrading project, and practiced the rural "toilet revolution" to assist the locals to improve their toilet conditions. In 2020, the Company successively funded the toilet renovation projects of the villagers activity center of Yukurhadilek Village, Kumukusar Township and the school of Tuogaidun Village, Tumantale Township, both at Maigaiti County, Kashgar Prefecture, benefiting 1,124 villagers and more than 350 teachers and students.

The Company encourages employees to actively participate in public welfare activities and carry out volunteer services. Since its establishment in 2018, the Volunteer Service Association has always encouraged employees to devote themselves to volunteer services with their expertise and provide important support for various public welfare activities. By the end of 2020, the Company has recruited 1,573 volunteers, accounting for about 18% of the total number of employees.

In 2020, the Company organized volunteers to participate in volunteer services such as assistance for the elderly and students, pandemic prevention and control, and tree care, with the total volunteer service hours of the year exceeding 8,600 hours.



◆ Goldwind volunteers went to the nursing homes of the elderly in Henan Village of Miyun District and Luoying Town of Pinggu District in Beijing

In the BDA School of the High School Affiliated to Renmin University of China, No.1 Primary School of Yizhuang, and No.2 Primary School of Yizhuang, "Love Exchange Cabinets" have been set up to promote the concept of "sharing is saving" and encourage everyone to exchange idle items. Together with other social organizations, the Company has completed the work of recycling used clothes and donated nearly 10,000 pieces of clothes to Pi Village in Chaoyang District to help local migrant workers and students.



◆ Love Exchange Cabinets

# Prospect

Goldwind has always been committed to its mission of Innovating for a Brighter Tomorrow. The Company focuses on the development strategy of renewable energy, and promotes green development and energy transformation through industrial innovation and global leadership in offering solutions of clean energy, energy conservation, and environmental protection.

For 2021, the wind power industry will gradually enter an era of parity, the impact of the COVID-19 pandemic will still have lingering effect, and the proposed carbon neutral target will bring more development opportunities for the wind power development. In the face of new opportunities, new challenges, and a new environment, the Company will turn challenges into driving forces and turn opportunities into victories, while adhering to the business philosophy of Driving a Renewable Future. The Company will continue to cooperate with industrial chain resources and actively explore the development path from a community of shared interests

to a community of shared future. The Company will lead the industry in developing high-quality and high-efficiency, striving for competitive improvement and sustainable development.

In the process of leading the sustainable development of the wind power industry, the Company will always focus on the joint development of economic, social and environmental benefits, taking into account the interests of all stakeholders. The Company will also strive to achieve sustainable and prosperous development. In the future, the Company will continue to improve its management system of sustainable development, consolidate essential work, and establish a long-term mechanism to continuously promote sustainable development. Goldwind is a global leader in wind power technology and is also an internationally respected energy solutions provider because of its core principles rooted in sustainable development.



Performance Indicators

»» Economic Performance

Indicator	Unit	2020	2019	2018
Total asset value	RMB 100 million	1,091.38	1,030.57	813.64
Revenue	RMB 100 million	562.65	382.45	287.31
Net Income Attributable to Shareholders	RMB 100 million	29.64	22.10	32.17
Tax Payments	RMB 100 million	20.37	11.17	14.62
Total cumulative installed capacity	GW	73.00	60.00	50.00

»» Research & Development

Indicator	Unit	2020	2019	2018
Number of R&D personnel	Person	2,910	2,826	3,132
R&D personnel as proportion of total employees	%	32.49	31.54	35.78
R&D investment	RMB 100 million	22.71	15.57	15.77
R&D investment as a percentage of business revenue	%	4.04	4.07	5.49
Total domestic patent applications	Item	4,486	4,043	3, 542
Total domestically invented patent applications	Item	2,519	2,207	1,990
Total domestic patent licenses	Item	3,100	2,580	1,826
Total domestically invented patent licenses	Item	1,257	958	520
Total overseas patent applications	Item	662	527	396
Total overseas patent licenses	Item	228	172	77
Domestic standard-settings participated	Item	230	220	178
International standard-settings participated	Item	16	15	13

»» Environmental Management

Indicator	Unit	2020	2019	2018
Power consumption (thermal)	100 million kWh	1.80	1.57	1.05
Power consumption (wind/solar)	100 million kWh	3.08	2.97	2.60
Proportion of green electricity used	%	63.11	65.42	71.23
Gasoline consumption	kL	2,154.83	3,948.66	2,190.22
Diesel consumption	kL	2,555.19	2,746.93	1,357.45
LPG consumption	Ton	21.92	33.75	31.11
Natural gas consumption	10k m <sup>3</sup>	48.61	49.73	50.73
Water consumption	10k ton	47.82	45.71	40.43
Water consumption per capita	ton/capita	53.33	51.01	46.19
Overall energy consumption per RMB 10k revenue	Ton of standard coal/RMB 10k	0.0118	0.0168	0.0173
Packaging material of wood	Ton	3,199.57	3,004.27	2,145.09
Density of wood packaging usage	Ton/pc	0.67	0.71	0.75
Hazardous waste	Ton	103.74	103.21	38.20
Construction waste from wind farms	Ton	826.68	363.59	2,082.71
CO <sub>2</sub> Emissions	Ton CO <sub>2</sub> e	140,232.09	128,883.67	74,209.08
Scope 1	Ton CO <sub>2</sub> e	12,460.36	16,809.55	9,420.23
Scope 2	Ton CO <sub>2</sub> e	127,771.73	112,074.12	64,788.85
Hazardous wastes generated per MW of WTG manufactured	Ton/MW	0.0082	0.0102	0.0063
CO <sub>2</sub> emissions per RMB 10,000 revenue	Ton CO <sub>2</sub> e/RMB 10k	0.0249	0.0337	0.0258



» Staff Structure

Indicator	Unit	2020	2019	2018
Total number of employees	Person	8,956	8,961	8,753
By employment				
Full-time	Person	8,956	8,961	8,753
Part-time	Person	146	187	337
By gender				
Female	Person	1,950	1,756	1,723
Male	Person	7,006	7,205	7,030
By age				
Aged 18-29	Person	2,203	2,601	2,807
Aged 30-39	Person	5,336	5,001	4,913
Aged 40-49	Person	1,043	1,070	815
Aged 50 or above	Person	374	289	218
By region				
China	Person	8,086	8,062	7,867
Other Asian countries	Person	56	34	75
Europe	Person	382	389	395
North America	Person	72	87	143
South America	Person	112	104	76
Oceania	Person	217	250	169
Africa	Person	31	35	28
By specialization				
Production staff	Person	1,362	1,372	632
Sales staff	Person	888	952	860
Technical staff	Person	2,910	2,826	3,132
Customer service staff	Person	1,714	1,918	2,141
Administrative staff	Person	2,082	1,893	1,988
By educational level				
Postgraduate or above	Person	2,078	1,741	1,797
Undergraduate	Person	4,696	4,315	4,450
College or below	Person	2,182	2,905	2,506

» Equal Opportunities and Recruitment Compliance

Indicator	Unit	2020	2019	2018
Labor contracts signing rate	%	100	100	100
Social insurance coverage percentage	%	100	100	100
Female management staff	Person (%)	81 ( 20.15 )	81 ( 19.80 )	84 ( 21.37 )
Employees with disabilities	Person (%)	62 ( 0.69 )	78 ( 0.87 )	30 ( 0.34 )
Ethnic minorities	Person (%)	456 ( 5.09 )	429 ( 4.79 )	478 ( 5.46 )
Foreign staff	Person (%)	834 ( 9.31 )	899 ( 10.03 )	752 ( 8.59 )
Annual paid vacation per capita	Day	9.84	9.24	8.63

» Staff Turnover Rate

Indicator	Unit	2020	2019	2018
Staff turnover rate	%	11.74	15.22	13.20
By gender				
Female	%	8.55	14.38	12.97
Male	%	12.58	15.38	13.27
By age				
Aged 18-29	%	15.67	15.41	17.47
Aged 30-39	%	12.24	15.01	11.92
Aged 40-49	%	11.30	14.04	10.16
Aged 50 or above	%	10.11	21.60	12.10
By region				
China	%	12.02	15.22	13.00
Other Asian countries	%	16.67	37.74	6.67
Europe	%	1.04	16.00	0
North America	%	2.70	20.21	26.73
South America	%	8.26	7.57	7.89
Oceania	%	20.52	17.18	17.75
Africa	%	8.82	28.57	3.57

»» Staff Training

Indicator	Unit	2020	2019	2018
Training hours per capita	Hour	32.31	32.07	31.87
By staff level				
Senior management	Hour	16.91	15.47	52.95
Middle & lower management	Hour	25.78	33.56	73.77
Junior staff	Hour	32.74	32.32	29.16
By gender				
Female	Hour	30.08	34.05	43.96
Male	Hour	32.93	31.39	27.89
Ratio of staff having received training	%	80.70	64.61	63.01
By staff level				
Senior management	%	72.03	58.69	72.60
Middle & lower management	%	79.32	80.30	89.30
Junior staff	%	80.83	64.15	62.00
By gender				
Female	%	80.13	58.69	71.72
Male	%	80.85	66.05	61.06

»» Occupational Health & Safety

Indicator	Unit	2020	2019	2018
Occupational disease	Person	0	0	0
Major safety incidents	Person	0	0	0
Casualties due to work accidents	Person	0	0	0
Working day loss due to occupational injuries	Day	218	106	147
Safety training sessions	Hour	301,794	354,916	232,987
By category				
Special operation staff	Hour	8,994	48,239	58,452
Safety management staff	Hour	16,528	8,864	8,980
Frontline operators	Hour	229,073	273,995	135,268
New employees	Hour	39,030	8,373	12,768
Persons in charge	Hour	8,168	15,445	10,400

»» Supply Chain Management

Indicator	Unit	2020	2019	2018
Number of major suppliers	Company	352	346	334
By region				
China	Company	283	249	237
Other Asian countries	Company	6	7	7
Europe	Company	52	70	70
North America	Company	11	20	20

»» Community Charity

Indicator	Unit	2020	2019	2018
Total charity donations	RMB 10k	607	1,659	705
The number of volunteers	Person	1,573	302	--
Volunteers served hours	Hour	8,600	1,674	--

# Independent Assurance Statement

To the Board of Directors of Xinjiang Goldwind Science & Technology Co., Ltd.:

SWCS Corporate Services Group (Hong Kong) Limited ("SWCS", "we") has been engaged by Xinjiang Goldwind Science & Technology Co., Ltd. ("Goldwind") to conduct an independent limited assurance ("Assurance Engagement") on the information and data disclosed in the 2020 Sustainability Report (the "Report") of Goldwind. SWCS conducted the Assurance Engagement on the Report of Goldwind in accordance with the AA1000 AccountAbility Assurance Standard v3 ("AA1000AS v3"). Moreover, SWCS has also been engaged to conduct the Assurance Engagement on the reliability and accuracy of selected performance indicators disclosed in the Report.

## I. Independence and Competence

SWCS was not involved in collecting and calculating data in the Report, nor in the development of the Report. SWCS’s activities are independent of Goldwind. There is no relationship between Goldwind and SWCS beyond the contractual agreement for providing this Assurance Engagement. SWCS has been recognized by AccountAbility. The assurance team of SWCS has extensive experience in the industry and has received professional training of standards related to sustainable development, including the Global Reporting Initiative Standards (GRI Standards), the AA1000AS v3, the Environmental, Social and Governance Reporting Guide (“ESG Guide”) issued by the Stock Exchange of Hong Kong Ltd. (“the Stock Exchange”), etc. The assurance team has sufficient understanding and capabilities of implementation of the AA1000AS v3, and the Assurance Engagement related to sustainable development issues is carried out in line with SWCS’s internal assurance protocol.

## II. Goldwind’s Responsibilities

Goldwind is responsible for the preparation and presentation of the Report in accordance with the ESG Guide published by the Stock Exchange. Goldwind is also responsible for implementing relevant internal control procedures to ensure that the contents of the Report are free from material misstatement, whether due to fraud or error.

## III. Assurance Provider’s Responsibilities

SWCS is responsible for issuing an independent assurance statement to the Board of Directors of Goldwind in accordance with the AA1000AAS v3. This independent assurance statement applies solely to express a conclusion on the assurance work in the specified scope of Goldwind’s Report, and does not serve any other intents or purposes. All results of assurance are internally reviewed by professionals to ensure that methodologies used in the process are sufficiently stringent and transparent.

## IV. Assurance Scope

The scope of the Assurance Engagement does not include Goldwind's suppliers, contractors, and information or data provided by other third parties. A Type 2 Moderate Level of Assurance of the AA1000AS v3 was adopted by SWCS to evaluate the nature and extent of Goldwind’s adherence to the four principles (Inclusivity, Materiality, Responsiveness and Impact) in accordance with the AA1000AS v3. The following specific performance indicators disclosed in the Report were selected for assurance by Goldwind and SWCS:

Scope	Indicators	Type of Information
Social	Preventive measures of anti-corruption and whistle-blowing procedures, and related implementation and monitoring	Qualitative
	Observing and protecting intellectual property rights	Qualitative
	Casualties due to work accidents	Quantitative
	Social insurance coverage percentage	Quantitative
Environmental	Power consumption	Quantitative

The Assurance Engagement was with respect to the information from 1 January 2020 to 31 December 2020. We do not express any conclusions on any information that falls outside this period or any other data disclosed in the Report not included within the assurance scope. The scope of the Assurance Engagement is based on and confined to the information provided by Goldwind. Any queries regarding the content or related matters within this assurance statement should be addressed to Goldwind only.

## V. Methodology

SWCS conducted Assurance Engagement only within Goldwind’s office in Beijing, and the assurance works conducted include:

- Conducting interviews with management and relevant departments that are responsible for collecting data on selected indicators, and documentation reviews;
- Understanding the processes and methods of Goldwind in identifying and collecting feedbacks from stakeholders;

- Assessing whether the reporting approach of the Report has been conducted in line with the principles of Inclusivity, Materiality, Responsiveness and Impact as defined in the AA1000AS v3;
- Reviewing Goldwind's sustainable development management and conducting sampling of selected indicators to understand its management system;
- Conducting random sampling of selected indicator information, assess the reliability of data collection, and understand the management system used to ensure data quality;
- Assessing whether the statement in the Report is consistent with the conclusion;
- Performing other procedures deemed considered necessary.

The Assurance Engagement was performed and the conclusions within were based upon the information and data provided by Goldwind to SWCS, and on assumptions that the information provided was complete and accurate.

## VI. Limitations

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable measures and measurement techniques and can affect comparability between entities.

## VII. Conclusions

Based on the Report of Goldwind and information provided, nothing has come to our attention that causes us to believe that the Report is not prepared, in all material respects, in accordance with the four principles of AA1000AS v3.

Based on the procedures implemented and the evidences obtained, we have not found anything that put us in doubt of the reliability and accuracy of the selected performance indicators for the Assurance Engagement in the Report.

## VIII. Key Observations

SWCS summarizes key observations of the Report against the principles of Inclusivity, Materiality, Responsiveness and Impact of AA1000AS v3 as follows:

### Inclusivity

Goldwind has identified key stakeholders, and identified the material issues as well as collected stakeholders’ feedback on material issues through questionnaire survey, and negotiated with parties that may be affected by Goldwind's operations. This Report has covered the environmental, social and governance aspects that Goldwind and its stakeholders are concerned about. In our professional opinion, Goldwind adheres to the Principle of Inclusivity.

### Materiality

Goldwind has conducted a materiality assessment to identify issues that are material to the company and stakeholders for the Report, and the result of the materiality assessment has been stated in the Report. In our professional opinion, Goldwind adheres to the Principle of Materiality.

### Responsiveness

Goldwind has established channels for its stakeholders to collect their views on material issues, and has developed relevant mechanisms or measures to respond to material issues. In our professional opinion, Goldwind adheres to the Principle of Responsiveness.

### Impact

Goldwind has identified its material impact on operations, and formulated relevant policies to mitigate its operational impacts on society and the environment through effective communication with stakeholders. In our professional opinion, Goldwind adheres to the Principle of Impact.





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**Tel:** +86- ( 0 ) 10-67511888  
**Email:** sustainability@goldwind.com.cn

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