

### 2021 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

DAQO NEW ENERGY CORP.





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We adhere to the concept of "dedicating clean energy, green development", continue to focus on our core business, and contribute to the rapid development of the photovoltaic industry by securing supply and improving product quality

### Message from the CHAIRMAN

2021 is a year full of opportunities and challenges. As the fight against the COVID-19 pandemic becomes a part of life, and the global consensus on tackling climate change strengthens, building a community of life for human and nature and embracing a new pattern of harmonious coexistence between human and nature is now a common mission shared globally by all enterprises and individuals.

2021 is also the year when China started its journey toward carbon neutrality. By incorporating the targets of carbon peak and carbon neutrality into the national strategy for economic and social development, and reaffirming the commitment under the Paris Agreement, China will move faster toward a resource-conserving and environment-friendly industrial structure with efforts led by the green transformation across the whole process of economic and social development and centered on the green and low-carbon development of energies. Among them, the photovoltaic industry plays a pivotal role in the development of circular economy and the green transformation of industries. With the technological iteration and industrial upgrading, photovoltaic power generation has become one of the most economical ways to obtain clean electricity in the world. Given the global campaign toward carbon neutrality, the photovoltaic industry is experiencing a period of high prosperity.

In 2021, our subsidiary, Xinjiang Dago New Energy Co., Ltd. was successfully listed on the Sci-tech Innovation Board (STAR Market) of the Shanghai Stock Exchange. We pledge to fulfill corporate social responsibility to our investors, employees, customers and other stakeholders. As one of the first solar photovoltaic high-purity silicon manufacturers in China, we adhere to the concept of "dedicating clean energy, green development", continue to focus on our core business, and contribute to the rapid development of the photovoltaic industry by securing supply and improving product quality. Seizing the opportunities presented by our times, we have focused on the Research & Development (R&D), manufacturing and sales of high-purity polysilicon through sustained investment in R&D and technological innovation, and made continuous progress in raising the quality, production scale and cost efficiency of polysilicon products.

While continuously creating economic values, we also actively fulfill our social responsibilities and promote the company's sustainable development in all respects. While providing polysilicon products with high quality, low energy consumption and low cost, we continue to strengthen risk and business ethics management, and enhance digitalized production and management. We care for our employees, welcome talents to join our company, and value the importance of employee training and development. In terms of environmental protection, we have implemented a number of technology renovation projects to promote energy saving and resource recycling. While reducing energy consumption, the recycling of production wastes increases both the economic and environmental benefits for the company. In terms of social engagement, we have carried out various public welfare activities to fulfill our commitment of giving back to the society.

Going forward, Daqo New Energy Crop. will build upon its competitive edge and continue to march forward. As stated in our strategic plan, we will continue to focus on the solar photovoltaic polysilicon industry, consolidate our strengths in technology and cost, and expand our capacity to provide high-quality polysilicon for the global photovoltaic industry and facilitate grid-parity for photovoltaic power. By turning solar energy into one of the most sustainable, cleanest and most economical energy sources, we will continue to give our support to the growth of sustainable economy and green development, and contribute Daqo's wisdom and solution to the global energy and climate challenges.

Chairman

每,唐福

Guangfu Xu

# ABOUT THIS REPORT

### Overview

This is the second Environmental, Social and Governance ("ESG") Report (the "Report") released by Daqo New Energy Crop. ("Daqo", "we", "us" or the "Company"), the aim of which is to present to the stakeholders the Company's management, practices and performance in economic and ESG practices.

### **Reporting Scope**

This Report covers the period from 1 January 2021 to 31 December 2021 (the "Reporting Period"). The business scope covers Daqo New Energy Crop. and its subsidiaries. The description of the environment data, employee data and related internal control management measures refers mainly to our primary operating subsidiary, Xinjiang Daqo New Energy Co., Ltd. (the "Xinjiang Daqo").

### **Basis of Reporting**

This Report is prepared with reference to the "GRI Standards" Core Option ("GRI Standards") published by the Global Reporting Initiative ("GRI") and the Rules of Shanghai Stock Exchange for the Listing of Shares on the STAR Market (Chapter 4 Section 4 Social Responsibility). This Report is determined in accordance with a set of existing procedures, which include identifying key stakeholders, identifying and ranking key ESG issues, determining the scope of the Report, collecting relevant data for the Report, preparing the Report and reviewing the information in the Report.

### **Data Source and Reliability Statement**

The financial data in this Report are derived from the financial statements for the year 2021, which have been independently audited by Deloitte Touche Tohmatsu CPA LLP (Special General Partnership), and other information and data are mainly obtained from relevant internal statistical reports or documents of the Company. All funds covered in the Report are measured in RMB.

### **Report Approval and Confirmation**

This report was approved by the Board of Directors on April xx, 2022 after confirmation by the management.

### **Access and Feedback**

The electronic version of the Report is available on the Company website.

We attach great importance to the opinions of stakeholders and welcome readers to contact us through the following channels. Your opinions will help us further improve our Report, as well as our overall ESG performance.

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**E-mail:** dqir@daqo.com

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ENVIRONMENTAL, SOCIAL & GOVERNANCE



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## Highlights of Key ESG Performance 2021

## $\langle \rangle$

### **Product Quality**

Product qualification ratio 100% Customer satisfaction ratio 96/100 Health & safety accident 0 Product return & replacement ratio 0%



**Technology Innovation** 

Total R&D related investment during the Reporting Period **RMB 375 million** 

45 new patents during the Reporting Period

**180** patent authorizations by the end of the Reporting Period

Participation in the formulation of **8** national, industry and group standards



### **Climate and Environmental Protection**

7.1% year-on-year drop in GHG emissions

**7 %** year-on-year drop in overall energy consumption



### Honors

**Top 10** in the semiconductor material category of the 4th China Electronic Materials Industry Top Company List

**Top 50** in overall ranking of the 4th China Electronic Materials Industry Top Company List



**Employee Training** 

**100%** training coverage

153,741 total training hours

64.3 training hours per person



### **Community Contribution**

Donating **RMB 1 million** to Shihezi Children's Home

Donating **36.5 tons** of disinfectant to local companies and public service institutions in Shihezi city during the pandemic



## Corporate Responsibility and Compliance



### **1.1 ABOUT DAQO NEW ENERGY**

### 1.1.1 Company Profile

Dago has grown rapidly since its establishment in 2007. In 2010, the Company got listed on the New York Stock Exchange (NYSE: DQ), and set up the subsidiary in Xinjiang, Xinjiang Dago New Energy Co., Ltd. On June 22, 2021, the Company received the approval from the China Securities Regulatory Commission for the IPO (Initial Public Offering) registration of Xinjiang Dago on the STAR (Science and Technology Innovation Board) Market and successfully completed the IPO on July 22 (stock code: 688303). With advanced equipment and technology, and professional R&D and management teams, the Company is among the polysilicon manufacturers with the lowest production costs in the world. Through years of development, Dago has gradually established itself as a leading global manufacturer of solar photovoltaic high-purity silicon.

### **Current Development Status**

At the end of 2021, Daqo has 2,399 employees and approximately USD 3.3 billion of total assets. Since the establishment of the Company, we have made sustained R&D investment and technological innovation in keeping with the direction of the country's new energy strategy and plan. Building on the advantages of low-cost energy supply and the clusters of the silicon industry base, we have focused on the R&D, manufacturing and sales of high-purity polysilicon. With an annual production capacity of 105,000 tons of high quality, low energy consumption and low cost high-purity polysilicon, we are now one of the major market players in the polysilicon industry. We have been included in the national list of "Hightech Enterprises", "National Technology Innovation Demonstration Enterprises"



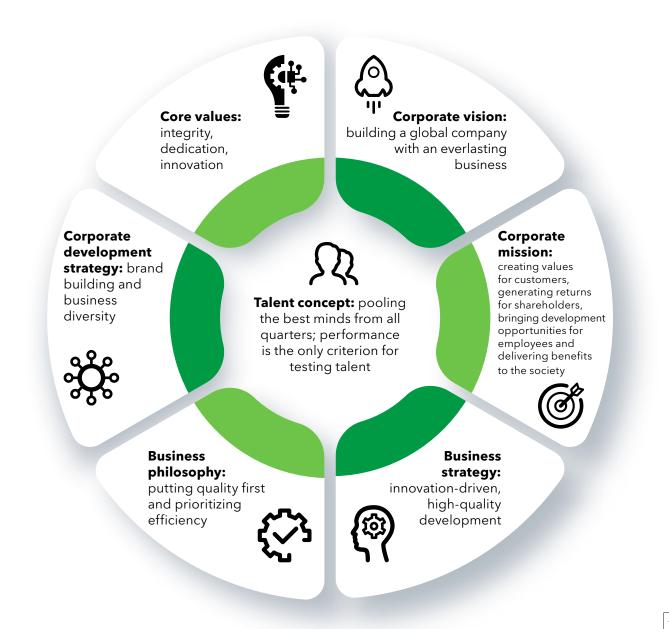
and "Intelligent Photovoltaic Pilot Demonstration Enterprises", and recognized by the National Development and Reform Commission and the Ministry of Industry and Information Technology. We have also built the "National-Local Joint Engineering Laboratory of Photovoltaic Silicon Material Development Technology", "Engineering Technology Research Center of Photovoltaic Silicon Material Manufacturing and Application", and "Autonomous Region-level Enterprise Technology Center".

### **Corporate Culture**

Daqo attaches great importance to the establishment of corporate culture system, which includes core values, corporate vision, corporate mission, business strategy, business philosophy, corporate development strategy, and talent concept.



Corporate culture is the belief and value that we in Daqo adhere to. We are committed to embedding our healthy and positive corporate culture in the whole process of corporate activities so as to help us optimize operational capabilities, achieve stable and positive growth, and continue to create values for our customers, the industry and the society.

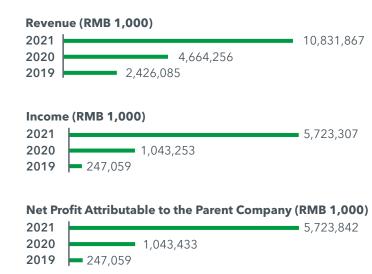


### 1.1.2 Business Overview

### **Primary Business**

The main business of Dago involves the R&D, manufacturing and sales of high-purity polysilicon products, as well as the production and sales of the by-products (silicon core, caustic soda, silicon tetraoxide, trichlorosilicon, dilute sulfuric acid, hydrochloric acid, sodium hypochlorite and silicon slag) in the manufacturing process of the above products. As one of the most competitive professional polysilicon manufacturers globally, Daqo has been able to manufacture the products with high quality, low energy consumption and low cost through technology improvement, process innovation, refinement of production and equipment improvement. Our main products, polysilicon, are mostly used in solar photovoltaic products such as silicon wafers, Solar cell and Solar modules. During the Reporting Period, our major subsidiary Xinjiang Daqo achieved a 132.23% increase in revenue,

448.6% increase in net profit, 448.56% increase in net profit attributable to the parent company.



### **1.2 CORPORATE GOVERNANCE**



aqo values integrity in business operation, and strictly abides by the *Cayman Islands Companies Law*, the *Company Law of the People's Republic* 

of China, the Securities Law of the People's **Republic of China**, the **Securities Exchange** Act of 1934, the New York Stock Exchange: Corporate Governance Guide, the Law of the People's Republic of China on Enterprise Income Tax, the Code of Corporate Governance for Listed Companies in China, the Rules Governing the Listing of Stocks on the Science and Technology Innovation Board of Shanghai Stock Exchange (Revised in 2019) and other laws, regulations and normative documents. At the same time, we continue to improve our corporate governance performance and protect the rights and interests of all stakeholders by improving our governance framework and refining our internal governance system, all for the purpose of pursuing a path of high-quality and sustainable development.

### 1.2.1. Board Structure

Based on the modern enterprise system and the actual situation of the Company, and in strict compliance with the legal and regulatory requirements of the regions where we operate our business and get listed, we have constantly updated and optimized our governance framework to ensure efficient operation of the Company. Under the Board of Directors, we have the Audit Committee, the Compensation Committee and the Corporate Governance and Nominating Committee, each of which has clearly defined powers and responsibilities. Through its supervision and management work, the Board ensures the Company



abides by the standards of business ethics while keeping compliance in operation, thereby protecting the interests of shareholders and the sustainable and stable development of the Company. When nominating and appointing members to the Board, we would make comprehensive considerations, including the industry experience and professional background of the candidates, in order to provide the diverse skills and experience required by each business segment. The Board members of Daqo have been deeply involved in the industry for many years and accumulated rich experience in the development of both domestic and global photovoltaic industries, which ensures the Company follows the right technical direction and business development strategy.

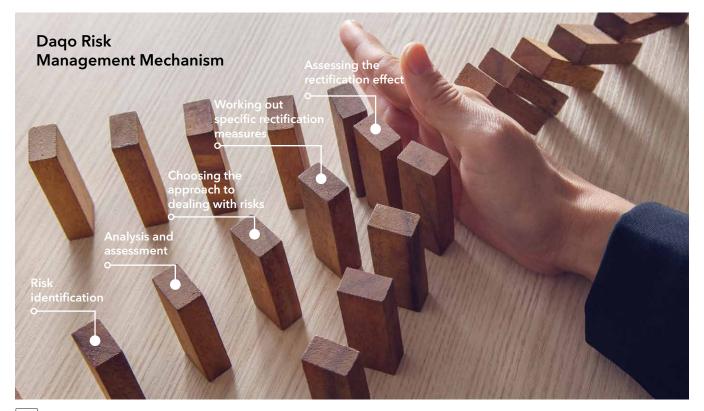
		E CONTRACTOR	Board of Directors		
c	Audit	С	compensation Committee	Corporate Governat and Nominating Committee	nce
Position	Name	Age	Committee	Industry Expert	Financial Expert
Chairman of the Board of Directors	Xu Guangfu	79		 ⊘	
Non-executive Director	Xu Xiang	50	Corporate Governance a Nominating Committee (Chairman)	und 📀	
Non-executive Director	Shi Dafeng	51	Compensation Committe (Chairman)	ee	⊘
Executive Director, CEO	Zhang Longgen	57		Ø	⊘
Independent Director	Zhuo Fumin	70	Compensation Committe	ee	
Independent Director	Arthur Wong	62	Audit Committee (Chairman)		⊘
Independent Director	Chen Rongliang	80	Audit Committee, Corporate Governance a Nominating Committee	ind 🕑	
Independent Director	Zhao Shuming	69	Compensation Committe Corporate Governance a Nominating Committee		
Independent Director	Liang Minsong	53	Audit Committee		⊘

For the detailed resume of the Board members, please refer to the 2021 Annual Report of Daqo

### 1.2.2. Risk Management

As a global manufacturer of solar photovoltaic high-purity silicon, Dago is risk conscious and continues to deepen and improve its risk management mechanism, including internal risk management system, risk management organization system, risk management special project and risk awareness and training program. The Company has established a work mechanism combining centralized management, assigned responsibilities, division of labor and participation by all to strengthen the risk management ability in all aspects. The risk management organization system is led by the Chief Financial Officer (hereinafter "CFO"), the Internal Control and Supervision Department undertakes the specific work of risk management as the responsible functional department, and all functional departments and professional units of the Company participate and strengthen risk control together. During the Reporting Period, the risk management function of the Internal Control and Supervision Department was further strengthened and refined, including exercising risk control in the process of project construction and rectifying and tracking the problems found during the on-site audit of the project, thus improving the Company's ability to identify, analyze and deal with risks.

During the Reporting Period, Dago further improved its risk management mechanism. The Comprehensive Risk Management **Measures** revised by the Internal Control and Supervision Department in October 2021 was put to implementation after the approval of the CFO. The corresponding Risk Catalog and Risk Factor Citation Table were also updated, and the risk identification, risk analysis, risk assessment and risk response plans were further refined and enhanced. The updated Risk Identification Form and Risk Management Response Form provide the basis for tracking and summarizing the risk identification and response plans submitted by each workshop and department. The Internal Control and Supervision Department tracks the progress of rectification on a monthly and quarterly basis, confirms the closure of risk items and produces risk identification reports. During the Reporting Period, the Company identified a total of 55 risks in categories A, B, C and D. Among them, all the 46 short-term risks with an impact of under one year have been mitigated of, with the rectification rate reaching 100%; the nine long-term risks have all been kept at the low risk level of categories C and D, and under continuous rectification by the responsible departments.



### **1.2.3 Business Ethics**

Integrity in business is deeply rooted in our core values, and the protection of stakeholders' rights and interests is embedded in our corporate mission. We understand that only strictly abiding by business ethics and the basic rules of a clean and transparent business community can we develop and operate in an orderly manner. We have established the Code of Professional Ethics and Business Conduct, which explains and defines various key issues related to business ethics and specifies the standard procedures of operation, covering compliance with laws and regulations in the places of operation, anti-discrimination and harassment, protection of intellectual property rights and information encryption, elimination of bribery, ensuring proper disclosure of Company information, and standardized use of Company assets.

During the Reporting Period, we took antifraud as the priority to further improve the Company's business ethics. The key measures adopted include updating the anti-fraud management system, updating the measures for whistleblower protection, and introducing more anti-fraud training and publicity initiatives. The revision of the anti-fraud management system in 2021 mainly includes the following content: clarifying the channels for anti-fraud reporting and complaint (anti-fraud email: xijd.solar@dago.com; anti-fraud hotline: +86 0993 270 6043), adding confidentiality clauses regarding the content of fraud cases, investigation process and investigation results, and the personnel involved, etc. At the same time, we have increased the cash incentives for anti-fraud reporting. For whistleblowers who have saved the Company's reputation, and prevented losses or major accidents, the Company will give them cash rewards based on the assessment of their contributions. For those making quantifiable contributions, the Company will give a cash reward equivalent to 1% of the contribution. During the Reporting Period, the Company was not involved in any corruption litigation case.

The Internal Control and Supervision Department, members of the fraud investigation team and the departments and personnel cooperating with the investigation shall keep the fraud matters confidential and shall not disclose the fraud investigation contents, results and related personnel information without authorization. The Internal Control and Supervision Department shall not disclose any information of the whistleblowers in the anti-fraud publicity and education activities held by authorization. After the investigation team verifies the complaint or report that constitutes a fraud case, the Company will reward the complainant or whistleblower according to the importance and value of the reported information. The award process shall be kept confidential.

Whistleblower Protection Initiatives

When a fraud report is received, the antifraud taskforce conducts an investigation and collects evidence with the authorization of the Company's senior management.



For anonymous reports, the anti-fraud team shall not seek to identify the handwriting or otherwise trace the information about the whistleblower.



In terms of anti-fraud training, the Internal Control and Supervision Department first identified the deficiency in anti-fraud knowledge of employees through the antifraud questionnaire, and the administrative and human resources departments organized targeted training for employees. In 2021, the anti-fraud questionnaire was expanded to cover the personnel in all departments. Through the questionnaire, we found that the personnel in the positions lacked knowledge about the Foreign Corrupt Practices Act (FCPA), and subsequently introduced a series of targeted initiatives including Q&A with consultants, publicity and education in the Company system, and special training for employees.

### **Supplier Integrity**

We attach great importance to clean procurement in supply chain management. All material quotations are made online, in order to remove the external intervention in price negotiations, prevent price fraud,



and ensure the fairness, impartiality and openness of the procurement process. In our cooperation with partners, we eliminate any possibility of fraud, corruption or bribery. While improving our own integrity, we work with our partners to establish a healthy ecosystem of business integrity. At the same time, we have made digital transformation part of our procurement management system. As a result, our procurement management has become more refined and transparent, and all material purchases are recorded and traceable.

### **Supplier Integrity Management**

#### Company

Transparent procurement process managemen

#### **Suppliers**

Making public the channels for anti-fraud complaints and receiving complaints and reports from relevant suppliers All the tender documents, and purchase and sales contracts of the Company must contain anti-fraud clause

Precluding falsification of qualification and financial documents by suppliers

Conducting regular integrity training for employees

Precluding conspiring and rigging bidding by suppliers



### **1.3 ESG GOVERNANCE**

n 2021, Daqo continued to act on the corporate mission of "creating values for customers, generating returns for shareholders, bringing development

opportunities for employees and delivering benefits to the society". As an upstream company in the photovoltaic industrial chain, Daqo has closely integrated the sustainable growth of its own business with the sustainable development of the world, committed to strengthening the consistency of its business and sustainable development goals, and introduced new ESG initiatives and practices.

### 1.3.1. ESG Governance

Daqo believes that the sustainable growth of the Company's business provides the foundation for creating long-term values.

**ESG Governance Structure** 

As its business continues to grow, Daqo has actively taken up its social responsibility and embedded ESG management and the concept of sustainable development in its daily operations and production.

In order to further improve the Company's performance in ESG management and ensure the stable implementation of ESGrelated matters, Daqo has optimized the three-tiered ESG management structure with the Board of Directors, CFO and the ESG Working Group at its core. Based on the ESG report, the Company will continue to increase the involvement of the Board of Directors in the process of ESG risk assessment and management, and make greater efforts to strengthen its own ESG management capability.



### 1.3.2. Stakeholder Engagement

Winning the trust and support of our stakeholders is very important to us. In order to better identify various types of ESG risks and opportunities, and establish workable objectives and plans on sustainable development, we have actively engaged with stakeholders in different forms on issues of common concern, in order to seek the opinions and feedback of different stakeholders and further learn about and respond to the views, demands and expectations of various stakeholders on ESG risks related issues. Through stakeholder engagement, we have further enhanced our ESG governance capabilities and effectiveness. The key stakeholder groups, issues to their interest and communication channels are as follows:

Stakeholders	Topics of Interest	Communication Channels and Means of Feedback	Frequency of Communication
Government departments/ regulators	<ul> <li>Performance</li> <li>Environmental Compliance</li> <li>Product Safety</li> <li>Product Quality</li> <li>Product Innovation</li> <li>Energy Use</li> <li>Greenhouse Gas (GHG) Emissions</li> </ul>	<ul> <li>Business Performance Report</li> <li>Meeting</li> </ul>	• Ad-hoc • Regular/Ad-hoc
Investors	<ul> <li>Business Performance</li> <li>Risk Management</li> <li>R&amp;D of Environmental Protection Technologies</li> <li>Anti-Corruption Initiative</li> <li>Corporate Governance</li> <li>Addressing Climate Change</li> </ul>	<ul> <li>General Meeting of Shareholders</li> <li>Investment Conference</li> <li>Corporate Announcement</li> <li>Roadshow</li> <li>Photovoltaic Industry Conference</li> </ul>	<ul> <li>Regular</li> <li>Quarterly</li> <li>Regular/Ad-hoc</li> <li>Ad-hoc</li> <li>Ad-hoc</li> </ul>
Employees	<ul> <li>Occupational Health and Safety</li> <li>Employee Training and Development</li> <li>Employee Benefits and Compensation</li> <li>Employee Rights Protection</li> <li>Diversity of Employee Background and Equal Opportunities</li> <li>Employee Hiring</li> </ul>	<ul> <li>Employee Training</li> <li>Employee Communication Activities</li> <li>Internal Publications (WeChat Social Media Platform, etc.)</li> </ul>	<ul> <li>Regular/Ad-hoc</li> <li>Monthly</li> <li>Ad-hoc</li> </ul>

Employee Hiring



Stakeholders	Topics of Interest	Communication Channels and Means of Feedback	Frequency of Communication
Suppliers	<ul> <li>Responsible Supply Chain Management</li> <li>Product Quality and Safety</li> <li>Technology Innovation and Intellectual Property</li> <li>Risk Management</li> </ul>	<ul> <li>Supplier On-site Assessment</li> <li>Quality Communication</li> <li>Supplier Training and Support</li> </ul>	<ul><li>Ad-hoc</li><li>Ad-hoc</li><li>Ad-hoc</li></ul>
Customers	Product Quality and Safety	Market Research	• Ad-hoc

- Addressing Climate Change
- Innovative R&D
- Coordinated Industry Development
- Complaint handling mechanism
- Customer Satisfaction
   R
   Survey
- Customer Complaint Handling
- Regular
- Ad-hoc



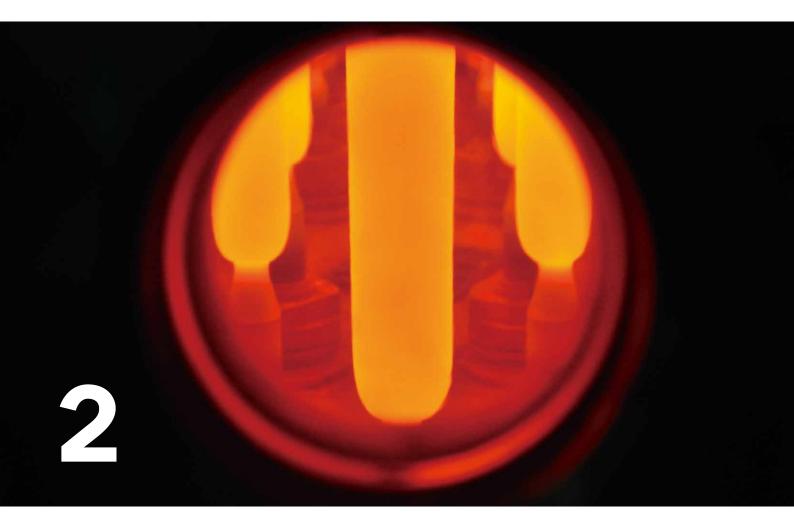


### 1.3.3. ESG Material Issues

During the Reporting Period, Daqo established a list of material issues with reference to the Company's own development, policy trends, media reports and industry benchmarking. Meanwhile, through in-depth communication with internal and external stakeholders, we ranked the materiality of the issues in terms of their impact on the Company's strategic operations and development as well as their impact on stakeholders, and 11 highly material issues were identified upon assessment: employee health, employee development, legal employment, labor rights, product innovation and R&D, product quality, product safety, corporate governance structure, GHG emissions, energy use and climate change. This Report addresses and discloses each of these material issues, particularly the highly material ones.

Economic Issues	1 Business P erformance	Labor Issues	19 Employee Health
	2 Tax Planning		20 Employee Development
	3 Government Support		21 Legal Employment
	4 Environment Impact of Trade		22 Labor Rights
Governance Issues	5. Corporate Governance		23 Employee Anti- Discrimination
	6 ESG Governance Framework	Community Issues	24 Community Contribution
	7 Anti-Corruption Initiative		25 Community Impact
Environmental Issues	8 GHG Emissions		26 Integration with Surrounding Community
	9 Energy Use		27 Compliance with Laws and Regulations
	10 Addressing Climate Change	Product and Service	28 Product Safety
	11 Environmental Compliance	Liability Issues	29 Product Quality
	12 Waste Management		30 Product Innovation and R&D
	13 Sewage Treatment		31 Complaint Mechanism and Handling
	14 Development and Utilization of Renewable Energy		32 Product Compliance
	15 Environmental Research and Development		33 Supplier Environmental Performance
	16 Investment in Environmental Protection		34 Supplier Social Performance
	17 Biodiversity		35 Supplier Labor Code Performance
	18 Status and Goals of Water Resources Use		36 Supplier Employee Rights Maintenance

### **ESG Material Issues**



## **Empowering Business with Innovation, Putting Quality First**

As an upstream manufacturer in the photovoltaic industry, Daqo understands that product quality and manufacturing capability is vital to expanding the scale of photovoltaic power generation. Motivated by this vision, we have strictly implemented the procedures for product assurance and technological innovation, and exercised full control of product quality with management as the foundation and technology as the driving force. In order to further improve the business objectives and production efficiency, Daqo is committed to pursuing transformation along the path of "automationdigitization-networking-intelligence", and deepening cultivation in the field of industrial innovation and digitalized production with the upgrade of internal management and the guarantee of external supply as the two major levers.

### 2.1 PRODUCT QUALITY

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n product quality, Daqo follows the principles of "scientific management, technology leadership, full participation, self-improvement, high

efficiency and low cost, and building a global quality brand". We continue to enhance the quality of our products through quality management, process optimization and professional training, and improve the performance of our services. We are committed to ensure compliance with an insight into demands and active communication, to achieve an upgrade in both products and services, and address both customers' demands and the industry's pain points.

### 2.1.1. Quality Assurance



GB/T 19001: 2016 quality management system certification

Daqo has been following the mission and philosophy of product quality assurance since its establishment. We have established a sound quality management system to

ensure that all our product indicators are up to the international advanced level. In order to control product quality in the whole process, we have adopted the modified Siemens closed-loop process and the advanced polysilicon production equipmentand established a product quality tracking system. By aligning with the stringent technical requirements, the Quality Control Department exercises strict control in raw material procurement, transportation, processing and storage when giving guidance on processing and production, and implements tiered control in process management. Based on our comprehensive quality management mechanism, we have delivered trustworthy quality at the product end. Meanwhile, we have obtained the quality management system certification, which ensures that all our products and production process meet the requirements of ISO 9001/GB/T 19001:2016 standard.

To further refine the standards and requirements of the quality management system in all aspects, Dago has established clear and comprehensive internal management systems and standard procedures to ensure the uniformity, professionalism and comprehensiveness of the Company's quality management. At the same time, we conduct strict archive management and annual review of the relevant systems and documents, and exercise dynamic product quality management by continuously optimizing the appropriate procedures. During the Reporting Period, Dago optimized and updated the following systems, further standardizing the quality management requirements on the production process, quality assessment, factory inspection, and other areas to ensure the best performance in product quality.



### Daqo Quality Control System

### Finished Product Quality Control

Further standardizing the inspection rules, quality control rules and polysilicon classification of finished polysilicon, and improving the process of on-site quality management

#### Finished Product Quality Control Management Assessment Regulations

Further standardizing the detailed rules for product quality accidents, quality management and the quality management assessment of internal inspection, and improving the transparent practices for on-site quality assessment

#### Product Delivery Quality Control Management System

Further standardizing the rules for the preparation and delivery of polycrystalline silicon, and strengthening the quality control of the delivery process of silicon materials

### Process Indicators Management System

Further standardizing the management rules for monitoring, changing and revising the process indicators of the production department, and strengthening the quantitative requirements in the production process



#### Process Specifications Management System

Further standardizing the content of process specifications, establishing the basis and cycle for revision and review requirements of the process specifications, and defining the management requirements of the production process

### 2.1.2. Quality Improvement

In order to continuously improve product quality and fully satisfy customer demands, Daqo implemented a quality management program characterized by "all-round, allstaff, whole-process participation and local team responsibility" during the Reporting Period, and applied it to the construction of Project 4B, with the aim of driving quality improvement through structured quality management mechanism.

Dago Project 4B was launched at the end of 2020 and put into operation in 2021. During the construction process, the construction unit and supervisory agency both took part in the work on quality improvement. We have adopted measures combining prevention, process refinement, acceptance check and quality assessment, and strictly enforced the quality management system and the standard procedures for quality acceptance. We have underscored the importance of quality control in preparation for construction, exercised strict control over the construction procedures, and tracked and assessed the effect of quality control after the completion of construction. Through whole-process, all-round quality control in the construction site, we have achieved the quality management objectives of the project and ensured the overall quality of both the project and products.

We have laid a strong foundation for the quality improvement of Project 4B through the management of raw material quality, production quality and engineering quality. At the same time, we have introduced a third-party supervisory agency to oversee quality-related work during the construction



of Project 4B. The supervisory agency supervises the project in strict accordance with the design drawings and relevant professional technical standards and specifications. Taking project quality as the top priority, they have practiced the work of quality improvement in keeping with the guidelines of "three controls, three management and one coordination".



### **Raw Material Quality Management**

- All engineering materials used in Project 4B shall be strictly checked before use. They can only enter the construction site after passing the joint acceptance check of the three parties, with the written acceptance record signed by all parties.
- The delivered materials are managed by category, region and specification following the standard procedures and the Company's



### **Production Quality Management**

• Detailed project planning and quality management system have been formulated in the early stage of project construction. The construction management department has checked all the quality control points, workshops, supervision units, and construction units, with written acceptance records, signed on-site and video recordings stored.



### **Project Quality Management**

- Every week, we organize factory-wide joint inspection of project quality, comb through and review the problems, and discuss and formulate rectification measures at the regular quality meeting of the same week
- Up to now, we have carried out 28 weekly quality inspections under Project 4B, located 743 quality problems and made 743 rectifications; conducted 5 special quality inspections, held 28 weekly quality meetings, and carried out 5 quality training and notification sessions.
- We have invited the project quality supervision department of Shihezi Development Zone to conduct the acceptance check. The one-

management rules, with clear records of warehouse inbound and outbound, to ensure the traceability of engineering materials.

- We organized an acceptance check for a total of 1,895 batches of materials used in Project 4B and on-site re-check for 1,613 batches of materials; found and returned four batches of non-conforming materials; and ensured the quality of the project at its source.
- On quality acceptance, we have adopted measures combining prevention, process refinement, acceptance check and quality assessment, strictly implemented the triple inspection system, and checked the critical processes for quality control in strict accordance with the requirements of class-A control points and checkpoints.

off acceptance rate was 100%, the oneoff acceptance rate of the foundation, base and main partitioned works was 100%, the excellence rate of unit installations was 93%, the one-off acceptance rate of equipment installation was 99.6%, and the one-off acceptance rate of welding was 96.8%.

• We have strictly followed the terms of the contract, and exercised synchronized management of the engineering documentation and progress. In the early stage of project construction, we informed all parties involved in the construction the management requirements and standards for engineering documentation, so that the parties can understand the management requirements and quality standards for the documentation.

### 2.1.3. Quality Services

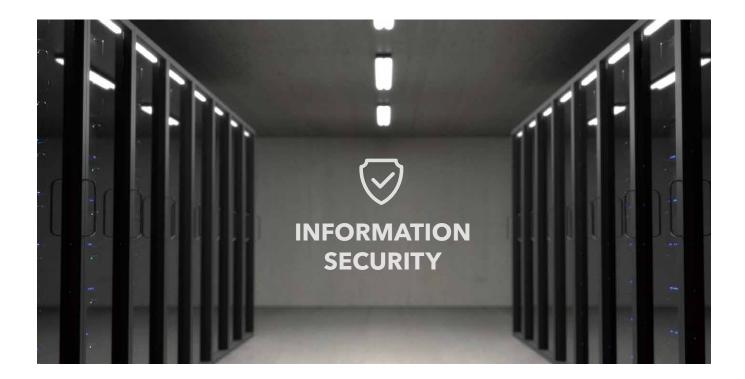
Daqo sees customer needs as the cornerstone of its business development. We attach importance to guaranteeing basic customer services and stand committed to fully protecting customer privacy and personal information. We have strictly abided by the *Cyber-security Law of the People's Republic of China, the Baseline for Classified Cyber-security Protection* and other laws, regulations and management systems, and built an information security system in line with the international standards on the best practices for information security management (IEC/ISO 27001-2013).

In order to ensure maximum protection for network and information security in the digitization process, Daqo has hired a

professional third-party agency this year for the implementation of the "factorywide information security assessment and consultation project" and jointly compiled the Information Security Construction **Plan** for the coming three to five years to reinforce the Company's cyber-security defense and guide the Company in resisting all kinds of network attacks. As a result, the Company has notably enhanced its ability to protect cyber-security and user information. Meanwhile, on personnel management, Dago has signed the Employee Confidentiality Agreement with all employees and organized training on information security for the Company's information system and management department, providing double protection for the security of business information.

### **Content of Daqo's Factory-wide Information Security Assessment**





Dago will continue to optimize the information security management mechanism, ensure service compliance, satisfy customer needs as much as possible, learn about their feedback through both active and passive communication, and constantly raise the level of customer satisfaction. We have established and implemented the Customer Satisfaction Measurement Procedures in terms of active communication with customers. By combining external investigation with internal self-examination, we have gained a comprehensive and objective picture of customer feedback, allowing us to evaluate and improve our work in both content and form. In addition, we have set up a complete and efficient complaint handling mechanism and the Customer Complaint and Return & Exchange Management System to provide a timely and effective response to the customers' feedback and opinions, formed a closed-loop for optimization through our efficient rectification and feedback mechanisms, and taken steps based on customers' opinions to improve the quality of services.

### Daqo Customer Complaint Mechanism<sup>1</sup>

### Response mechanism

• After receiving the complaint, the relevant department is immediately informed, and the 8D report is also initiated at the same time to ensure timely reply in one to two working days.

#### Rectification mechanism

• After receiving the 8D report, the responsible department immediately starts analyzing the causes and assigning the responsibility, confirms the rectification measures and completes the quality improvement report.

#### Feedback mechanism

• Giving timely feedback to customers and alleviating their concerns through effective communication.



1. The 8D report referred to in Daqo's customer complaints is a report that makes analysis using the problem-solving procedures of the 8D method (Eight Disciplines). The report is dedicated to solving quality problems with the PDCA cycle as a standard pattern.

This year, the number of customer complaints received by Daqo is on a downward trend. Currently, most of the complaints are about foreign objects and broken package. In order to further improve the quality of services, we immediately started working on rectification to make sure that customer needs are fully satisfied.

### Daqo's Rectification Measures in Response to Customer Complaints

### Complaints against foreign objects

We exercise whole-process control in three aspects, i.e. status of equipment on the automatic packaging line, quality of auxiliary packaging materials and personnel management, and conduct high-frequency inspection and evaluation. Once abnormalities are found, the products with quality risks are immediately reported and frozen as required. They will only be reactivated after the abnormalities have been removed to prevent the outflow of abnormal products.

### Complaints against package damage

We exercise control over the whole goods transportation process to prevent massive package damage during the test-use of auxiliary packaging materials. We also control the amount of silicon powder in the crushing, screening, dust removal and humidity in the clean area of the workshop, so that there will be fewer and ultimately no complaints and concerns caused by package damage. In order to provide services to customers through compliant and appropriate marketing methods, Dago continues to improve its marketing performance in both management system and personnel empowerment. On management system, we have strengthened the audit of publicity materials, and further clarified the basic data source and the production and approval process of various publicity documents and contents to ensure the uniformity and compliance of publicity materials in terms of message and form. On personnel empowerment, Dago has further enhanced the employees' ability and awareness of compliance marketing by organizing staff training, and improved the experience of customer services by ensuring full compliance with the system's requirements in the professional services of all employees. We have constantly strengthened our workforce to provide a strong foundation for improving customer services. During the Reporting Period, we organized eight staff training sessions, covering topics including business communication, customer maintenance, risk prevention, and product information. We are committed to upgrading services based on professional knowledge and ensuring a sound customer experience through comprehensive management.



### Daqo New Energy's Automated Packaging and warehousing Facility



### **2.2 TECHNOLOGICAL BREAKTHROUGHS**

aqo is committed to building a scientific and technological innovation platform based on market principles. Taking research capability as the

driving force for development, we have taken all-round actions to promote conceptual innovation, management innovation, technological innovation and institutional innovation to facilitate the generation of R&D results; we take the industry's development as our own responsibility, and actively carry out joint R&D, technology exchange and experience sharing, in order to promote the progress of the whole industry. From product research and development to scientific and technological breakthroughs, Dago is deeply engaged in innovative development, and stands committed to sharing its innovation outcomes to benefit the whole value chain.

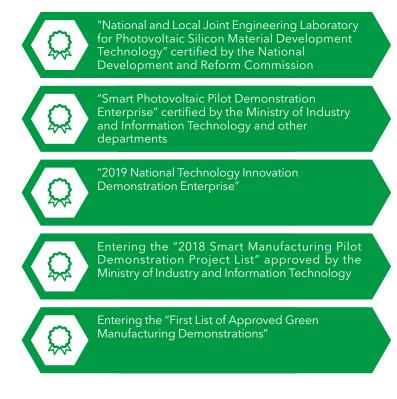
### 2.2.1. Scientific and Technological Innovation

Taking science and technology as the foothold, Daqo has focused on promoting the overall strategic development of the industry. We see scientific research capability and innovative spirit as the driving force for the Company's development, and stand committed to advancing the science and technology development of the Company through institutional incentives, resource support, model optimization and talent development. On institutional guarantee, we have established and implemented a number of management systems and procedural documents such as the Management System for R&D Projects, the Patent Management System, the Implementation Measures for Rewarding Scientific and Technological Achievements, and the Management System for Publishing Papers and Publications, to strengthen the drive for innovation and R&D and protect the Company's patent achievements. This year, Daqo has updated and optimized the relevant systems, strengthened the performance assessment requirements of scientific research projects and set the

amount of bonus for patent application, which has further raised the quantifiability and assessability of the progress of R&D projects.

On resource support, Dago has an R&D team composed of domestic and foreign experts for the polysilicon industry and a management team with international background, and on this basis, we have established a technology committee to oversee the Company's diversified technology development and R&D strategy. We have also established an R&D management system, under which the technology committee, R&D-related departments and functional departments work together to ensure maximum support for R&D projects. Meanwhile, through active cooperation with external parties, Dago has acquired abundant resources of scientific research bases and R&D platforms, which has supported the Company's research and innovation efforts targeted at the technical difficulties of the industry.

### External Recognition and Support Received by Daqo



### Daqo's High-tech Enterprise Certificate



In order to meet the R&D needs under different scenarios, Daqo has adopted various organizational approaches for R&D management. Through the means of R&D cycle management, R&D taskforce management and the dispatch of technical personnel to the production department, we have ensured accurate control and adequate resource support for the cost, organization, risk control and benefit of research projects, and guaranteed the smooth implementation of R&D projects to the maximum extent.

In terms of the models of scientific research, Dago is focused on integrating scientific research with risk control, business and production, to ensure the effectiveness and applicability of R&D results. When establishing the R&D projects, we take R&D projects as the basic units and set up R&D taskforces consisting of a diverse group of R&D, production and other personnel to ensure the control of resource deployment and project feasibility, and improve the R&D performance with a comprehensive perspective. In the R&D management stage, we have adopted the working mode of R&D cycle, exercising precise and timely management and supervision of personnel organization, material organization, cost input and risk control in different stages of the R&D process, and conducting dynamic assessment and monitoring of the input-tooutput ratio of scientific research projects. In the R&D application stage, we dispatch the technical personnel to the production line to manage the project, in order to facilitate the smooth commercialization and onthe-ground application of the R&D results and make sure that the research projects

bring practical benefits to our business development.

Daqo provides incentives and targeted training opportunities for research professionals on talent development. In addition to performance incentives based on the assessment results of R&D projects and cash incentives for patent and paper owners, we have set up a career development incentive system for the title evaluation and job promotion of R&D personnel. The system makes sure that our professional talents can put their talent to best use and create good results with the guarantee of systems and resources.

### 2.2.2. R&D Outcomes

With a complete scientific research management mechanism, Daqo has made continuous efforts to improve our R&D performance and promote the efficient application of R&D results. To exercise comprehensive management of R&D results, we have set up the annual plan for scientific research, adopted the sub-project approach to divide the R&D projects into sub-projects based on their tropics, and assigned the sub-projects the relevant department or workshop. As of December 31, 2021, Daqo has launched 38 technology R&D subprojects, of which 19 have been completed and 20 are still on-going.

With business needs and the technical difficulties of the industry as the target of centralized R&D, Dago is committed to improving business performance by harnessing the power of scientific research, with a balance between customer needs and industry development. In 2021, the Company focused its technology research on the quality control of high-purity polysilicon, improvement in conversion rate and material recycling, heat recovery and reuse, energy conservation and efficiency. As of now, all R&D projects have produced satisfactory results. We will continue to promote the verification and application of R&D results, and practice the R&D concept of driving productivity growth and business development with science and technology.









### Key R&D Outcomes of Daqo in 2021

### R&D on the comprehensive energy recovery and utilization of polysilicon device

We have completed the energy consumption analysis and research of key devices, and established the corresponding energy consumption model. Based on the model, we have initially determined the optimal heat exchange network, and started the process of verification and optimization on key devices.

### Study on the process for reducing the content of metal and non-metal impurities in polysilicon

We have optimized the detection methods and influencing factors to ensure the consistency of detection methods and instrument interference, and completed the development and research of cleaner production process and detection methods

Study on the improvement and upgrade of the process in the silicon dichloride anti-disproportionation system

We have located the suitable catalysts, authorized four proprietary technologies, and completed the transformation and application of the R&D outcomes. The design, small-scale test, pilot test and industrial application of the technical scheme have all been completed. During the year, Daqo continued to step up R&D investment, with total R&D-related investments reaching RMB 375 million for the year, and the number of patent applications and new patents also hit a new high. The detailed statistics are as follows:

Number of patent applications in 2021	57
Invention patent	13
Utility model patent	44
Number of new patents in 2021	45
Invention patent	1
Utility model patent	43
Overseas patent	1
Cumulative number of patents applied before the reporting deadline	258
Invention patent	67
Utility model patent	189
Overseas patent	2
Overseas patent Cumulative number of patents obtained before the reporting deadline	2 <b>180</b>
Cumulative number of patents obtained before the	
Cumulative number of patents obtained before the reporting deadline	180

### 2.2.3. Joint R&D

Daqo has long focused on the R&D of high-purity polysilicon products, and has mastered a series of core technologies and research outcomes after more than ten years of independent R&D and technology introduction and absorption. We are committed to disseminating and sharing scientific research results and practical experience, gathering the strength of the industry to achieve synergistic development, and working together with partners on the value chain to raise the overall quality, bring down costs, and reduce the energy consumption of the industry, and jointly foster a sustainable industrial chain.

On university-enterprise R&D cooperation, Dago has put in place an integrated operation mode of production, learning and research based on our experience of R&D cooperation accumulated over the years. We have established strategic relationships with universities that have strong R&D capabilities in related fields, such as Shihezi University, Tianjin University, Jiangsu University and Dalian University of Technology, to consistently promote the transformation and application of scientific research outcomes. In July 2021, the "R&D and Application of Basic Information Platform for Process Industry Intelligent Manufacturing based on IT-OT Integration"

project launched by Xinjiang Daqo together with Shihezi University and Dalian University of Technology was identified by the Science and Technology Bureau of Xinjiang Construction Corps as a major science and technology project of the Construction Corps for 2021.

On experience sharing with the industry, Daqo sees the dissemination of advanced practical experience and technology in the industry as an extension of its business. While contributing to our technology upgrade and application integration, it also facilitates the R&D and industrialization of the semiconductor and polysilicon industry. During the Reporting Period, we participated in five industry seminars to share our experience and insights on technical issues and industry trends.





### Main Industry Activities Participated by Daqo in 2021

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On March 18, 2021, Daqo participated in the 3rd General Assembly (Annual Meeting) of the China Photovoltaic Industry Association in Hefei, and exercised its right under the articles of association as a vice chairman unit.

On May 12, 2021, Daqo participated in the 2021 Shihezi Polysilicon Industry Development Forum & Meeting of the Polysilicon Council of the Silicon Industry Branch of China Nonferrous Metals Industry Association, held on the theme of technological innovation, transformation and upgrade and efficient development



From September 9 to 10, 2021, Daqo participated in the fourth China International PV Industry Summit Forum in Chengdu. Daqo's Vice Chairman joined the panel discussion as an industry expert.

From December 21 to 23, 2021, Daqo participated in the annual Silicon Industry Conference of The Silicon Industry Branch, and exercised its right under the articles of association as a vice chairman unit.

In 2021, Daqo participated in all the quarterly surveys on PV industry development organized by China Photovoltaic Industry Association.

### Daqo's Contribution to the Formulation of Industry Standards in 2021

Based on its rich industry experience and advanced technology, Daqo participated in the formulation and revision of five national standards, and the formulation of two industry standards and one group standard in 2021, giving further impetus to the promotion of standard and professional production in the industry.

Participated in the draft for discussion of the national standard *Fluidized Bed Granular Silicon*, which is still in the stage of discussion

Participated in the work on the national standard Per Unit Energy Consumption Quota of Polysilicon and Germanium Products, which is currently in the stage of submission for approval

Participated in the draft for discussion of the national standard **Determination of Carbon and Oxygen Content in Monocrystalline Silicon, Infrared Spectroscopy for Low-temperature Fourier Transformation**, which is currently in the stage of discussion

Participated in the draft for discussion of the national standard **Determination of the Lifetime** of **Minority Carriers in Silicon and Germanium**, **Photoconductive Attenuation Method**, which is currently in the stage of discussion

Participated in the draft for preliminary review of the national standard *Electronic Grade Polysilicon*, which is currently in the stage of preliminary review

Participated in the draft for preliminary review of the industry standard **Determination of Impurity Content in Hexachloroethylsilane, Inductively Coupled Plasma Mass Spectrometry**, which is currently in the stage of preliminary review

Participated in the industry standard *Evaluation Requirements for Green Factories in the Polysilicon Industry*, which is currently in the stage of submission for approval

Participated in the draft for preliminary review of the group standard *Nitrile Gloves for Semiconductor Clean Environment*, which is currently in the stage of submission for approval

## 2.3 INDUSTRIAL UPGRADE



o implement the innovationdriven development strategy, Daqo continues to explore industrial upgrade while cultivating its main business.

Against the background of high-quality development, we have adopted new technologies and new models to develop our business, laid a solid foundation for digitized management through practice, and actively promoted the application and further exploration of digitized manufacturing. Looking to the future, from foundation to innovation, and from innovation to intelligent and networked development, Daqo will always stay in the forefront of the industry and take concrete actions to promote industrial upgrade through the digitization practice.

### 2.3.1. Digitized Management

Guided by the innovation-driven development strategy, Daqo is committed to growing its business with new technologies and new models, and ultimately gaining industry-leading advantages through intelligent manufacturing. We have completed a series of digital transformation projects as a way to improve the Company's operational efficiency and extend the industrial chain. During the digitization process, Daqo has focused on ensuring the execution of standard management procedures and advanced the reform of digitized management to ensure the success of the project. The Company has seized the opportunity of the synchronized launch of ERP and MES systems to speed up the construction of the digitized management mechanism and build an information highway with all-around data connectivity.



### **Digitized System**

At present, Daqo has established a fully integrated digital platform covering the functions of procurement management, production management, sales management, inventory management, quality management, financial management and equipment management. In terms of digitized system integration, the Company has already established Enterprise Resource Planning (ERP), Manufacturing Execution System (MES), Application Lifecycle Management (ALM) and Warehouse Management System (WMS) and other systems, and formed a complete management process and business development logic aligned with the production and operation goals. In order to ensure comprehensive and efficient information management, Daqo has made active exploration and advances in institutional building, organizational structure and personnel development, and worked hard to consolidate the foundation of digitized management so that the Company could steadily and smoothly take up digitized manufacturing. and technical consultants of the Information Department and the information engineers of the business departments. We firmly believe that a clear path for training talents with diverse backgrounds will provide an inexhaustible supply of digitized management professionals and build a solid foundation for Daqo to embrace digitized manufacturing.



On institutional building, Dago updated the Information Management Rules and **Regulations** in 2021, adding content related to the digitized systems, and clarifying the responsibilities, scope and classification of digitized management as well as the standard procedures and reminders for the use of various digitized systems. At the same time, we introduced new institutional documents such as the Statement of Information Security Responsibility and the Emergency Plan for IT Accidents to further guarantee the security and stability of digitized management. In order to ensure that the established systems are comprehensive and effective, Dago invited an external third party this year to conduct IT audits, and made corrections and revised the process based on the audit results to create a solid and reliable institutional foundation for digitized management.

### **Training of Digitization Professionals**

Responding to the call of the Information Department, Daqo has made utmost efforts to promote the training of IT professionals in the fields of informatization-industrialization integration, industrial Internet and digital transformation, and cultivate a multitiered, system-based and highly competent workforce. Through our digitization platform, we have gradually established a model for training composite talents based on the cooperation between the IT business



#### Training Mode of Digitized Information Management Professionals



## IT business and technical consultants of the Information Department

A clear path for the promotion of employees in the Information Department: from IT specialist to IT engineer, and to chief IT engineer; the supervisors of the taskforces of the digitized business system will be trained as key talents for management skills to build a reserve echelon.

## Training of information engineers of the business departments

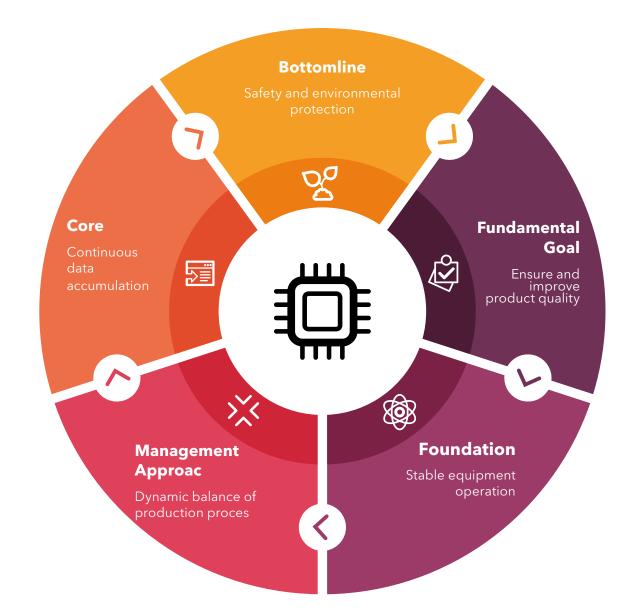
As the reserve force of the Company's IT construction project, all the information engineers of the business departments are the key players in the Company's digitized manufacturing project. Every month, the Information Department assesses the information management work of the information engineers of each department and conducts performance appraisal. Those qualified can participate in the selection and become a technical consultant of the Information Department

### 2.3.2. Digitized & Intelligent Manufacturing

Building on our well-established digitized management system, we will move forward to promote the deep integration of the digitized systems and our business. We aim to guarantee the timely collection of data, ensure the uniformity of the system information flow and business flow, and create a complete pathway of digitized manufacturing through level-by-level and layer-by-layer business monitoring and analysis. Daqo's digitized manufacturing system basically covers all its business areas. Meanwhile, the Thingwox industrial Internet platform provides data interconnection with the factory-wide Distributed Control System (DCS). It accumulates business data from various fields, which enables us to constantly improve the production process of core production and raise product quality through modeling analysis.



### Principles of Daqo's Digitized Manufacturing System





Daqo's digitized manufacturing system has been in operation for more than one year, and all business links have been running smoothly in the system. Through the deep integration of digitized management and digitized manufacturing, the operation data is collected, analyzed and alerted in real time to promote the continuous improvement of all management items, and reach the set target in each manufacturing link. Meanwhile, we are also continuously exploring 5G-based application scenarios, such as drone inspection, intelligent robot inspection and wireless data collection. We are already actively communicating with relevant suppliers to prepare for their application in the future.

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## **Progress in Digitized Manufacturing in 2021**

Whole-process control on site	Driven by objectives, tasks and data, we exercise whole-process, closed-loop control of the production plan, production process and actual performance in the workshop; we made a total of 2,136 dispatching orders, and completed 214,256 operations and 475,538 process inspections, and the efficiency of on-site management has been notably improved.
Real-time monitoring of production operation	Through the monitoring and early warning of real-time operation data, 10,400 abnormalities have been spotted so far, 97% of which have been processed in time, which has ensured the timely detection and handling of abnormalities in process indicators, and greatly promoted the stable operation of production. At the same time, based on the monitoring and early warning data, 776 hidden dangers have been found and removed in time, including 6 major hidden dangers, giving further assurances to production safety.
Whole-process control of product quality	A total of 960,000 batches of inspections have been carried out, and 140,000 batches, or 15% of the total, were obtained through the integration of quality inspection equipment. Combining with the real-time monitoring and early warning data of production operation, we have ensured the monitoring of product quality in all links of production, and realized whole-process management of the product quality life cycle.
Equipment whole-life-cycle management	We now have a total of 56,646 sets of equipment; managed a total of 409,189 work orders of various types, such as repair and maintenance, with a timely completion rate of 98%, and 100% timely completion rate for accident-related work order, realizing whole-life-cycle management of equipment, from operation, maintenance to scrapping.
o Fully realizing department- level digitization performance appraisal	We have made full use of digitized system to extract performance appraisal data. All department-level performance appraisal indicators are based on the data in the system, achieving a 100% coverage. The full application of digitization in performance appraisal makes it more accurate and timely.
o Achieving initial results in restoring data modeling	The system provides a management platform for the collection and analysis of reduction furnace operation data and furnace batch parameters. To date, we have collected a total of 10,892 batches of reduction furnace operation data, and optimized and improved 835 parameter versions for production, which are already showing visible results.

While ensuring the smooth operation of digitized manufacturing in various links, Daqo has tried to expand the integration of the digitized manufacturing system with the Company's business, and has made progress in applying digital technologies in Project 4B4B and the data warehouse project. We are committed to creating a replicable, reusable and collaborative platform, so as to further grow our business and promote innovation and change.

## Digitized manufacturing program adopted in the *Project 4B*

From the end of March, we began to collect the digitization demands of Project 4B. On June 30, the digitization scheme of Project 4B was approved and started to be adopted for the implementation of the digitization system. Through the digitization system of Project 4B, we have extended and expanded the Company's digitized management and digitized manufacturing into Project 4B.

Progress of digital application under the Design and Construction of Telecommunication (amplifying intercom and generic cabling) of Project 4B

On June 17, the Company sent a taskforce to Hualu Design Institute for one month to sort out the needs for the telecommunications (amplifying intercom and generic cabling) system, communicate the plans for the design schemes and lay out the conditions for designs. At the end of June, the Company reviewed the procedures, equipment list, and materials. The construction of the project started in September, and is expected to be completed by the end of April 2022



## Progress of digital application under the Daqo Data Warehouse Project

We have adopted GreenPlum, Doris, Python and other big data tools to build an enterprise-level data warehouse platform; realized the automation, standardization and systematization of the Company's monthly operation reports through the construction of a report analysis system; produced the summaries of system usage statistics and abnormalities to monitor system usage and improve the closed loop for abnormality handling; standardized the data requirement and model for large screen, Kanban, and report specification to improve efficiency, and optimize the existing analysis application. Based on the data warehouse, we have deployed and implemented the BI management platform, to support the "one platform" information management mode and provide the basis for the Company's business decision-making. We did the reporting of the blueprint scheme on October 22; ten business areas and 43 detailed sub-topics have been set out, and all the systems are scheduled to be launched in March 2022.

## 2.4 SUPPLY ASSURANCE

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To ensure the stability of supply chain is an inevitable requirement of Daqo's transition toward high-quality development. Vertically,

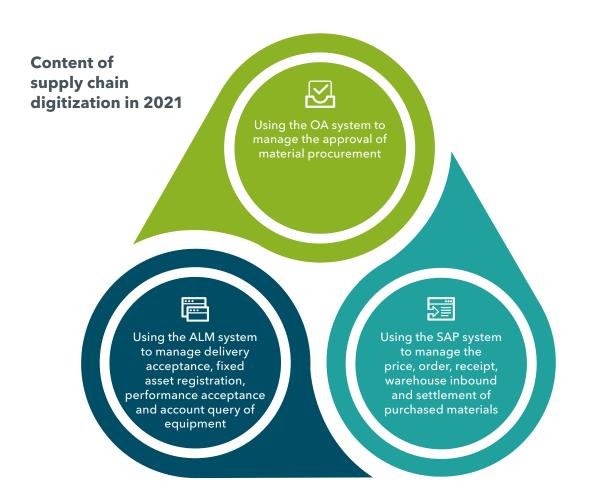
we have secured the satisfaction of production demand and the distribution and use of raw materials through our comprehensive supplier management mechanism; horizontally, we have ensured the balance between supply and demand by empowering our suppliers. Relying on technological innovation and institutional innovation, Daqo has integrated digital transformation with supply chain management, and worked vigorously to promote a steady increase in supply.

## 2.4.1. Supplier Management

The security and stability of the supply chain is an important guarantee for building the Company's business pattern. Daqo attaches high importance to supplier management and works with industry partners to cultivate a sustainable supply chain system and provide a solid guarantee for products with the stable input of high-quality raw materials. Daqo has established and followed a series of supplier management systems and standard procedures, including the Supplier Approval and Management System, Qualified Supplier Management Policy, and Supplier Rating Policy, to ensure that clear and explicit working guidelines are provided in the whole process of supplier management.

#### **Digitized Supplier Management**

In order to improve the efficiency of business operation and strengthen the Company's digitization capability, Daqo has further integrated its supply chain with a digitized management system this year, and provided corresponding institutional guarantee and resource support to ensure the smooth progress of the relevant work.



#### **Supplier Access Criteria**

Supplier access control is an important way for companies to ensure the quality of raw materials from the source. We strictly control the supplier access process and evaluate the access results based on the suppliers' performance in both multidimensional assessment and batch trial to make sure that suppliers are capable of meeting the Company's requirements in business ethics, product quality, contract performance and other aspects. As of December 31, 2021, we had a total of 427<sup>2</sup> suppliers.

### Daqo's Supplier Assessment Initiatives

#### -Multi-dimensional assessment:

We put forward different requirements for new suppliers in terms of quality, capacity, delivery time and cost, etc. In addition, we will assess its CSR management performance in terms of employee rights and interests, environmental protection and safety management, so as to ensure the sustainable development ability of suppliers

#### `- -Batch trial:

We conduct mass trials of products provided by suppliers. After the products pass the trial, all departments of the Company will conduct a comprehensive assessment, and establish the annual list of qualified suppliers to complete the access process

#### **CSR Management Requirements for Suppliers**

#### **Employee Rights**

- All suppliers have completed and signed the Declaration on Protecting the Lawful Rights and Interests of Employees and Opposing Forced Labor, and made the following commitments:
  - Prohibition of forced labour
  - Prohibition of child labour
  - Prohibition of discrimination and sexual harassment in the workplace
  - Protection for the lawful rights and interests of employees

#### **Employee Rights**



- ISO 14001 environmental management system certification
- The suppliers have all signed environmental protection-related regulations in the procurement contract, and made the following commitments:
  - Strictly abiding by relevant environmental laws and regulations
  - Avoiding damaging the environment of product manufacturing site, construction area and circulating water body
  - Eliminating construction practices that pollute the environment





- Safety Production License
- The suppliers have all signed the safety-related regulations in the procurement contract, and made the following commitments
  - Strictly abiding by laws and regulations related to construction safety and occupational health
  - Preventing personal and equipment accidents and undertaking the commitments of safe and civilized construction
  - Creating a sound living and working environment for employees, and eliminating unsafe and uncivilized construction practices

<sup>&</sup>lt;sup>2</sup>. A total of 74 suppliers participated in the assessment in 2021, including 3 A-grade suppliers, 56 B-grade suppliers, 15 C-grade suppliers and 0 D-grade suppliers.

#### **Supplier Quality Control**

We see the quality inspection of the supply chain and supplier evaluation as the significant tasks of supplier management and work to ensure the quality and stability of the supply chain through the whole process. Regarding the supply chain's quality inspection, the suppliers' materials must go through a strict quality inspection upon arrival and can only enter the warehouse after passing the examination. Suppose the delivery failed in the quality inspection, the Company will immediately return and exchange the goods and require the supplier to issue an 8D report for the unqualified batch, analyze the causes of the quality problems in the information and propose short-term and long-term solutions.

#### Supplier Assessment

On supplier assessment, Daqo conducts monthly and annual evaluations of suppliers to assess their supply assurance capability in multiple dimensions, which provides effective reference for our supplier management in the later stage.

## **Content of Supplier Evaluation**

#### **Monthly Supplier Evaluation**

In the monthly evaluation, we count the timely delivery rate and quality conformity rate of suppliers through the information system, and require unqualified suppliers to make rectifications.

### **Annual Supplier Evaluation**

In the annual evaluation, we assess the performance of qualified suppliers from multiple dimensions, i.e. quality control, delivery and competence assurance, price level, technical capability, followup service and enterprise qualification. We also manage the suppliers with a four-tiered rating system, i.e. excellent, good, qualified and unqualified.

## 2.4.2. Empowering Suppliers

On the basis of improved supplier management, Daqo is making continuous efforts to empower its supply chain partners, push for the progress of the whole value chain through technical exchanges and communication on practical issues, and promote efficient and win-win cooperation between the upstream and downstream. Over the years, Daqo has introduced a series of supplier exchange initiatives and shared experience and insights about the industry with its supply chain partners in an annual supplier conference to promote harmonious cooperation.

#### **2021 Annual Supplier Conference**

On October 15, 2021, Daqo held the annual supplier conference, inviting the senior executives of the suppliers to a face-to-face communication with Daqo's management on issues such as company development, innovation and cost reduction, and cooperation environment. Some 80 representatives of 36 suppliers were invited to the conference. All the issues raised by the suppliers received feedback.



Daqo takes the improvement of supplier quality as a goal for both sides, and actively assists suppliers to carry out quality improvement and technology development projects. This year, we have conducted an empowerment project for the suppliers of silicon packaging cartons. Through joint experiment and validation assistance, we successfully helped suppliers reduce packaging costs while significantly increasing carton capacity, achieving a winwin for the Company and our partners in the industry.



# **Caring for Employees, Creating a Better Future**

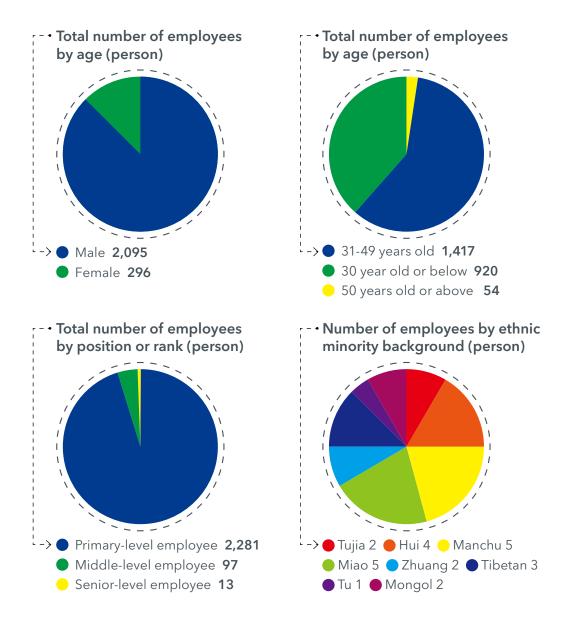
Following the talent concept of pooling the best minds from all quarters, Daqo is committed to growing business together with employees all the time. We firmly believe that every employee is a valuable asset of the Company, and we embrace every employee with warmth by strengthening the talent ladder construction, cultivating the professional skills of employees, protecting their basic rights and interests, and caring for their welfare.

## **3.1 WORKFORCE OVERVIEW**



ago strictly abides by the Labor Law of the People's **Republic of China**, the Labor Contract Law of the People's Republic of China and other national laws and regulations. We have also formulated and thoroughly improved various employee management systems, including the Comprehensive Administrative Management System, the Recruitment Management System, the Company Performance Appraisal Management System, and the Remuneration and Welfare Management System to comprehensively protect employees' lawful rights and interests in recruitment, promotion, remuneration and welfare. Meanwhile, we have stepped up the digitization efforts and made continuous progress in improving the digitized management platform to promote efficient employee management.

In addition, we are committed to creating a diverse work environment. We pay attention to women's rights and interests, fully respect the differences of employees in gender, age, race and cultural background, strictly prohibit the practice of child labor and forced labor, and prohibit employee discrimination and unequal competition in any form. As of the end of the Reporting Period, we had a total of 2,391 employees, 24 of which were ethnic minorities.



#### 3.1.1. Employee Hiring

The talent concept of "pooling the best minds from all quarters" is an important part of Daqo's corporate culture, and we see employees as the source of innovation for the Company to achieve sustained business growth. We continue to optimize the configuration of human resources to secure the human resources needed for the Company's sustainable and stable development. We have been adhering to the concept of fair and transparent talent recruitment, and insisting on the recruitment principles of equal opportunity, fair competition and merit-based selection in the employment process.

Daqo has established a comprehensive recruitment management system, formulated an effective recruitment plan in line with the Company's business needs, attracted talents with the required professional knowledge, skills and experience from all quarters, and provided a big stage for all employees to develop their career and rapidly grow up. During the Reporting Period, we optimized the internal system for competitive recruitment and employee promotion to keep up with the business development of the Company, and further strengthened the talent pool. Meanwhile, we strictly abide by recruitment-related laws and regulations, establish a rigorous recruitment management process, and identify possible risks in the management process to ensure timely response and rectification.

## Prohibition of Child Labor and Forced Labor

We have established a **Candidate Background Check Form** to verify the identity of new employees before they join the company and ensure the Company's compliance in labor management. The Company prohibits the employment of child workers under the age of 16, and prohibits any form of forced labor, i.e., any work or service performed by any person under the threat of any form of punishment (especially by violence, coercion or restriction of personal freedom) that is not performed voluntarily by the person being forced.



## **3.2 TALENT CULTIVATION**



aqo is committed to supporting the development of employees all the time. We attach great importance to the cultivation of employees, and stand

committed to creating an unimpeded path for employee development, and try to build a talent team with high standard and high quality.

## 3.2.1. Employee Development

Promoting employee development has always been our priority. By adopting measures and initiatives such as performance-based management, clear promotion channels, mentorship and apprenticeship, we continue to consolidate and clear up the path of career development for our employees.

The performance appraisal of employees is a process that checks and analyzes various links and elements of the Company's performance-based management. It is also a process for running in-depth check and analysis of the overall management status and operating capability. By perceiving and analyzing the work performance of the employees, the appraisal system is able to reveal the Company's existing problems, which could serve as the basis for strengthening the overall management of the Company and enhancing its core competitiveness. In order to promote the Company's business goals, asses the performance and contribution of employees with objectivity and fairness, and form a talent management system driven by clear goals, we have developed and improved the Company Performance Appraisal Management System, the Employee Annual Appraisal Management System and other internal management systems, and established an appraisal system combining "monthly and annual appraisals" to continuously improve the competence and efficiency of the employees.



## **Monthly Appraisal**

- The superior decides the content of KPI assessment according to the annual production and operation objective book
- Talk with the employees with poor assessment results in the current month to learn about their work situation and short-term objectives and, help them find and overcome deficiencies to improve working ability, and set the goal of the next month to meet the competence requirements of their post.

## **Annual Appraisal**

- "360°" comprehensive assessment of the employees with reference to factors such as monthly assessment results, work report, personal leadership, colleague opinions, work arrangement, etc.
- Put forward proposals that address the deficiencies of employees based on the results of annual assessment to help employees improve their work efficiency and quality

To establish the Company's long-term mechanism for "selecting, hiring and retaining employees", meet employees' needs of career planning and development, and build the channels for the employees to pursue career development, Daqo has formulated the Management Measures for the Career Development Channels of *Employees*, which includes four different channels, i.e. management channel, technical channel, technician channel and auxiliary channel, to help our employees pick promotion channels and achieve planned career goals based on their own professional competence and personal aspiration, and form a complete, unified, standardized and scientific promotion management system.



### **A Scientific Promotion Management System**

#### **Classified promotion**

Employees choose the promotion channel according to their job position

#### **Result oriented**

Employees get promoted and demoted according to the results of annual promotion assessment

#### **Competence oriented**

All promoted employees shall meet the competence laid out in the job description of the target position

#### <sup>o</sup> Dynamic adjustment

The rank of employees could move in both directions according to the results of promotion assessment and competence review

#### Fairness, equity and openness

The criteria for promotion assessment are scientific and proper, the promotion process is fair and just, and the promotion results are made public in time

### **Apprentice Ceremony**



The Administration and Human Resource Department organizes "apprentice ceremony" for the mentors and mentees of various departments of the production system to consolidate their affinity, promote the concept of harmonious talent development, and better leverage the mentoring, supporting, guiding and teaching role of the excellent employees in the Company.

## 3.2.2. Employee Training

Dago firmly believes that the coordinated progress of talents and organization is an important means for the Company to achieve long-term development. We have been committed to building a high-quality employee training system. In 2021, we set a strategic annual training goal. To achieve the goal, we established the Methods for the Management of Platform Operation, further improved the Management Rules for Internal Trainers and the Management Rules for Employee Training and Cultivation, arranged for the workshops to review and optimize their internal training management system, standardized the management procedures for internal training of all departments, and clarified the content of training, and the reward and punishment standards. In the meantime, we formulated the training plan for the employees of new projects, including setting up training groups, clarifying the division of responsibilities and the process and requirements of training implementation, verifying the training effect and providing incentives for employees, lecturers/mentors. We also conducted random inspection on the training results of front-line employees in various departments of the production system on a monthly basis. During the Reporting Period, we successfully completed the annual training targets through the above measures.



#### 2021 Annual Training Targets

Comprehensive promotion and implementation of the training system:Replacing the traditional model of training management with digitized and systematic management, promoting targeted alignment between supply and demand, combining online and offline training, and applying multiple training methods in parallel, to improve the efficiency and quality of training management

100% training participation rate of new employees (including new employee training in the Xinjiang base and new employee training in new project base), and 100% qualification rate of active personnel

The per capita training hours of the employees in the production system shall be no less than 14 hours per month, and the qualification rate of the functional departments (Administration and Human Resource Department, Production Department, Safety and Environment Department and Equipment Department) for the pass rate of verification of the monthly training effect of the production system shall be no less than 95%.

Deepening university-enterprise cooperation: Improving the basic theoretical knowledge and professional quality of existing employees, and building the reserve of future talents

Enhancing the management capability, professional quality and skills of primary-level employees as well as managers and technicians (especially new employees), to raise the professional skill and quality of the Company's management and technical personnel

The Company provides rich training courses for employees. We take the annual assessment results of employees as an important basis, follow closely their development planning and provide targeted training for them, and help them meet various needs of career development and build up professional competence. During the Report Peroid, we have launched a series of training programs, including special training and university-enterprise training.

## SPECIAL TRAINING

#### **Special Training for Project 4B**



We asked all departments to review and complete the establishment of the curriculum system for the posts of Project 4B based on the post requirements of Project 4B and the employees' competency for the posts. A leading group for the training verification of Project 4B has been set up in the Company to check the pretraining effect of the public works workshop, trichlorosilane workshop, rectification workshop II and other workshops involved in Project 4B. A total of 57 employees participated in the training verification, which was mainly carried out in the form of random questioning by the leading group, and the objective evaluation on the mastery of knowledge and skills of the personnel in each department. The Administration and Human Resource Department issues the report of training effect verification.

## Squad leader capacity-building training



We sent eight squad leaders to Urumqi to participate in the special training - "Huawei style" training camp for the capacity building of squad leaders, and organized internal transfer training and experience sharing for the squad leaders of various departments of the production system.



## Special Training on Clean Room Management



To support the production system, we launched a special training on clean room management and equipped our employees with the professional knowledge for the production and quality management of high-quality silicon materials. Eight employees obtained the certificate of junior clean room engineer through the training.



### **Deepening University-Company Cooperation on Employee Training**

#### -• Enrollment Expansion of Shihezi • - - -Vocational Technical College

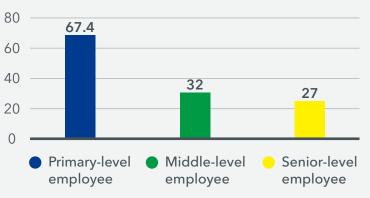
In cooperation with *Shihezi Vocational Technical College, we signed the Joint Training Agreement in the Form of Enrollment Expansion of Higher Vocational College,* and arranged the registration, tuition fee payment and interview for 119 employees to seek further education. -• Enrollment Expansion of Shihezi • --Vocational Technical College

We worked with *Shihezi Vocational Technical College* to launch the Daqo titled class. The Company set up its internal lecturer team, and formulated and implemented the plan of teaching incentives for the lecturers. The training program runs for a total of two months, including two senior management lectures, and nine weeks of practical training (segmented internship) for the students in the Company. The practical training is arranged with coordination and tracked for results.

During the Reporting Period, Daqo trained 2,391 employees, with a 100% training coverage rate. The total training hours of employees were 153,741.3 hours, an average of 64.3 hours per person.



#### Average Training Hours per Employee by Rank (Hours)



## **3.3 CARING FOR EMPLOYEES**



aqo understands that employees are the basis for the stable development of the Company. We attach great importance to employee care,

protect employees' rights and interests, and promise to treat every employee with an attitude of reason and fairness. We establish a competitive remuneration system, listen to the voice of every employee seriously, organize various characteristic employee activities actively, and strive to create a warm and happy work environment for employees.

### 3.3.1. Employee Rights and Interests

Daqo respects and values every employee and fully protects their rights and interests. We strictly abide by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Law of the People's Republic of China on the Protection of Women's Rights and Interests, the Provisions on Collective Contracts and other related laws and regulations, prohibit any form of employee discrimination, harassment or threats, and promise to treat every employee with fairness and impartiality.

We protect the lawful rights and interests of employees, establish harmonious and stable labor relations, safeguard and protect the lawful and special rights and interests of female employees, and promote the stable and sustainable development of the Company. During the Reporting Period, the sixth plenary meeting of the first Daqo Trade Union was held, and 200 employee representatives and trade union representatives took part in an equal-footed consultation for the signing of the new Collective Contract. The collective bargaining process facilitates the employees gain a better understanding of the importance of the collective contract, protects the rights and interests of the workers, and enhances the awareness of both the managers and employees to operate compliance to law, manage compliance to law, and uphold rights compliance to law, thus generating "double benefit" for the Company and the employees.

#### Protecting the lawful and special rights and interests of female employees

• We have formulated the Special Provisions on Labor Protection for Female Employees and signed a Special Collective Contract for the Protection of Female Employees' Rights and Interests with them, including commitments in such aspects as pregnancy protection, maternity leave and physical examination, to promote the common development of the female employees and the Company.

> Protection of Employee Rights and Interests

## Protecting the lawful rights and interests of employees

- We respect the right and freedom of employees to join the trade union according to law.
- We respect the right and freedom of employees to participate in collective negotiation of labor contracts according to law.
- We respect employees' personal dignity and privacy, and do not illegally use or disclose employees' personal information.We have established a rigorous file management system. The files containing employee information are stored in a special cabinet overseen by a designated staff, and all the electronic copies are encrypted to ensure full protection of employee information.

## 3.3.2. Remuneration and Welfare

Daqo sees talents as the cornerstone of the Company's development. We attract and retain talents through our mature remuneration and welfare system. In accordance with the Social Insurance Law of the People's Republic of China, the Labor Law of the People's Republic of China and other laws and regulations, we have established and improved our internal management systems, including the Salary and Welfare Management System and the Salary Scale. During the Reporting Period,

## Protecting the lawful rights and interests of employees

 The Company provides employees with fair development opportunities and treatment, and prohibits discrimination against any employee in any form, regardless of their nationality, race, gender, nationality, birthplace, political or religious belief, etc.

we conducted surveys on the salary levels of companies in the neighbouring communities and peer companies in the industry, which has enabled us to know about the competitiveness of the remuneration we offer, keep track of the remuneration trend, and set out more effective remuneration strategies in the future.

In order to ensure the stability of the Company's core management team and key technical workforce and enhance the remuneration competitiveness of the Company, we have analyzed the remuneration level of our key workforce such as squad leaders and engineers, and made three remuneration adjustments to employees at all levels, with reference to the data of external remuneration surveys, during the Reporting Period. In addition, we provide multiple additional benefits to our employees to give them care in all respects.



## **Employee Benefits**

Social insurance	Social insurance, such as pension insurance, medical insurance, work injury insurance, maternity insurance and unemployment insurance and payment of housing fund as required by state laws
Holiday benefits	Legal holidays, paid annual leave, marriage leave, funeral leave, nursing leave, family visit leave (reimbursement of travel expenses), etc.
Employee apartment	We provide employees with standard rooms of employee apartments in the urban area, with supporting facilities such as digital TV, water heater, gas stove, washing machine and furniture. The apartments are commercially managed, with safety assurance, independent toilet, central heating and 24-hour hot water.
Staff gym	The Company provides a gym covering an area of 500 square meters, equipped with fitness facilities such as treadmill, sports bike, elliptical machine, dumbbell, billiard table, table tennis table,etc. to enrich the cultural life of employees during their spare time.
Free commuter bus	The free commuter buses cover the main streets of the urban area, making travel convenient for employees.
Other benefits	Wage by seniority, annual physical examination, festival bonuses/gifts, trade union activities, transportation and communication subsidies, wedding gifts, serious illness and death condolences and other benefits.
	Ethnic festivals in Xinjiang (Rouzi Festival and Gurbang Festival): the Company strictly implements the holiday documents issued by the government and arranges holidays for employees of different ethnic groups.

#### 3.3.3. Employee Communication

We believe that heeding the call of employees is an important way to stabilize the operation of the Company, and we actively listen to employees' voices and encourage them to express their demands. To this end, the Company has established various channels for employee communication and actively communicated with new employees and current employees on a regular basis to fully learn about their thoughts and give timely response to their demands.

#### **Employee Communication Mechanisms**

#### Intra-department communication

- Employees of various departments communicate regularly with each other
- Making improvement to the working environment and workflow based on stated business goals

#### Communication with the Administration and Human Resource Department

- Every month, the employee relations specialist interviews the current employees to learn about their work, life, career planning and other information
- The recruitment specialist and employee relations specialist conduct monthly interviews with resigning employees to learn about their thoughts and reasons for leaving, to help improve the work environment and reduce the turnover rate of employees

## Communication with the general manager

- General manager mailbox
- Face to face with the general manager



"Hand in Hand" Mutual Support Fund



We attach great importance to giving care and assistance to employees struggling with difficulties and major diseases. We have established a regularized and standardized assistance mechanism, strictly implemented the **Management Rules of the "Hand in Hand" Fund**, and rigorously verified the employees' difficulties to provide them with targeted assistance. In 2021, the Company raised RMB 65,460 of assistance funds from 1,484 employees, and helped eight employees overcome their difficulties in life with the allocation of RMB 11,000 from the fund, bringing the warmth of the "big family" to the employees.

#### Satisfaction survey

- Interview new employees to learn about their current situation and satisfaction with the company
- According to work needs, we conduct special surveys on topics such as logistics staff (canteen), and make targeted investigation according to the survey results. Surveys on employee satisfaction with canteen services are conducted on a quarterly basis to improve canteen services and raise meal quality and variety

#### 3.3.4. Employee Activities

In 2021, despite the diffculities along the way, Dapo employees continued their journey forward. From summer to winter, our hard-working and dedicated employees have created countless heart-warming miracles. We are committed to enriching the cultural life of employees, giving employees a stronger sense of fulfillment, happiness and security, and creating an employee-centered, harmonious and pleasant atmosphere so that our employees can always grow together with the Company.



We know that every solid and firm step taken by the Company on the road of development is inseparable from the joint efforts of all employees and the understanding and support of their families. In order to help the family members of the employees get a more comprehensive and in-depth understanding of the work of their loved ones and share the joy and expectation of the Company's growth, we hosted a Family Day in June 2021 for the family members of our employees. They visited the central control room, canteen, workshop and other places in the factory, and learned about the use of the product and the production process. We also prepared toys, stationery and other gifts for employees' children. During the event, we shared moments of joy, celebrated friendship and envisioned a brighter future together with the employees and their families.

### "Bringing Coolness in Summer and Warmth in Winter" and Other Welfare Activities



Throughout the year, the Company carried out seven welfare activities, including "Bringing Coolness in Summer and Warmth in Winter" and "A Gift of Health". We showed our care for the employees by bringing mung beans, beverages, down vests, warmer pads, milk tea, heatstroke drugs and other supplies to the front line of production and construction.

## **Family Day**



"Caring for Women" Activity



On the International Women's Day, Daqo invited all female employees to watch the movie *Hi, Mom* and sent its festive greetings to the great Daqo women.



### **Cultural Activities**

We endeavor to create an employee-centered and pleasant work environment, and encourage our employees to balance their work and life. We organize various cultural and sports activities, including basketball game, tug-of-war competition and photographic contest, to enrich the cultural life of employees.



#### **Basketball Game**

In September 2021, the Daqo Basketball Team participated in the eighth "New Journey, Healthy Park" Workers' Basketball Game local tournament.



#### **Tug-of-war Competition**

In November 2021, the sixth tug-of-war competition of Dago employees was held. Breaking away from the traditional competitive model, this year's competition is held in the form of "multi-direction tug-of-war". The competition takes place in two stages, i.e. knockout and final, and consists of two events, i.e. team competition and men's and women's individuals. The tugof-war has fully demonstrated the solidarity and fighting spirit of Dago employees and further boosted the cohesion, unity and appeal of the Company.



#### **Photographic Contest**

In order to enrich employees' leisure life and create a healthy and upward atmosphere of corporate culture,the Company held a creative photography and short-video contest on the theme of "Celebrating the Mid Autumn Festival and the National Day"After a rigorous review process by the judging panel, 13 photos and five short videos won the final awards.

## **3.4 HEALTH AND SAFETY**

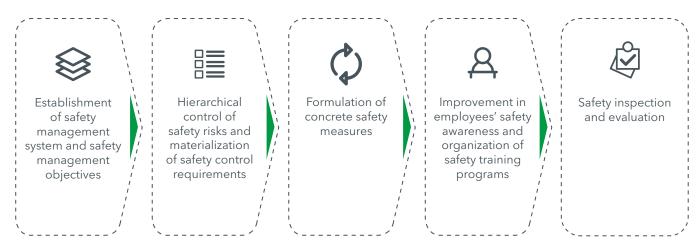
he occupational health and safety of employees is the top priority for any producer. We earnestly implement the principles of "putting safety first and focusing on prevention", and constantly optimize and improve the occupational health and safety management system to ensure the Company's orderly practice and law compliance in production safety. We have strengthened our safety management capability in all aspects, and strived to create a healthy and safe working environment for all employees.

## 3.4.1. Production Safety

Dago strictly abides by the **Production** Safety Law of the People's Republic of China, the Production Safety Accident Emergency **Response Regulations** and other national and local laws and regulations. During the Reporting Period, the Company organized a review of the practicality, applicability and timeliness of the safety operation procedures, safety management regulations and other related documents of the 16 workshops of the whole factory. Based on the results of the review, we revised and improved the Compilation of Safety Rules and Regulations, the Production Safety Responsibility System for all Employees, the Fire Safety Management System, the

**Compilation of Occupational Health Rules** and Regulations, the Management System for Guardians of Special Operations (Trial Implementation), the Emergency Response Plan for Production Safety Accidents and other internal safety management systems and operating procedures to establish a sound safety management mechanism, further enhance the capacity for production safety control, protect the personal safety of employees and reduce the incidence of safety accidents. As an enterprise that has reached the level-two safety standards in the hazardous chemical industry, we have conducted benchmarking management on the investigation and overhaul of safety risks and vulnerabilities of hazardous chemical enterprises, and established a management system based on double-prevention.





## Daqo's Safety Management System

#### Safety Risk Management

Dago constantly strengthens safety risk management to eliminate safety accidents from the source. The production and operation section of the Company is responsible for controlling the risks in production process. It conducts monthly risk reviews, exercises risk control on a hierarchical basis, focuses on the inspection and control of risks that have caused or may cause accidents, and reports the significant risks to the Company. The management team assesses the reported risks in the annual review, and establishes the priorities of risk control for the next year based on the review results. The hierarchical system of risk control has gradually lowered the accident rate of the Company. During the Reporting Period, the Company established a digitization abnormality and hidden danger control platform to implement online management of abnormalities and hidden dangers in production. Through real-time monitoring of core process indicators, we have been able to provide timely feedback on process warnings and give timely response to production abnormalities. With these precautionary measures, we have strengthened the guarantee for production processes, and laid the foundation for a smooth production process.

#### **Hidden Danger Investigation**

The workshops conduct weekly self-inspection and self-examination of the local devices, and the Production Department conducts random inspection on a weekly basis. The records the discovered problems are kept in the online ledger, with specified date of rectification, and the corresponding workshops are requested to make timely rectifications, and record the rectification measures, completion status, rectification person and other information in the online ledger to complete the closedloop. The online system allows us to check the completion rate of abnormality rectifications and monitor the abnormality in the closedloop, which effectively reduces the accident rate of the Company. In 2021, the Company conducted a total of 49 hidden danger inspections.

#### **Emergency Management**

implementation of emergency rescue in accidents, and provide maximum protection of personal safety to employees, we have formulated the Xinjiang Dago New Energy Co., Ltd. Emergency Plan for Production Safety Accidents, which includes comprehensive on-site disposal plans, and initiatives to raise the employees' ability for dealing with accidents. In order to better build the emergency rescue team and help the employees get familiar with the contents of the emergency plan, the Company organizes regular emergency drills to strengthen the employees' preparedness against accidents. In 2021, we planned 46 emergency drills and completed 46 drills.

#### **Safety Training and Activities**

We attach high importance to cultivating employees' safety awareness and operation skills. To enhance the employees' capability of safe operation and safety management, we have organized a series of employee training programs on production safety. In 2021, we planned to cover 100% of the new employees in safety training and education, and completed the 100% coverage.

Total hours of safety training hours

57,260 Hours

Total number of employees covered by safety training

28,200 Hours

## Measures to Enhance the Management of Employee Safety

We organize safety training for employees. After passing the training, new employees go to the production site to further their study and they can only start their work after completing learning and training and passing the examination.

The Production Department and the Administration and Human Resource Department conduct monthly on-the-spot inspections to check whether the employees have mastered the operational skills, and produce an inspection record based on the results.

To deal with emergency situations, the Production Department has arranged for the workshops to prepare emergency operation card and process operation card. These operation cards have been programmed into the operation processto guide the operation of employees and ensure production safety.



### **Squad Activities**

In 2021, we carried out diverse activities on the theme of employee safety to strengthen the Company's safety culture and help the employees raise their safety awareness in the fun activities.



Competition on breathing apparatus wearing and fire hose connection

The competition includes the wearing of breathing apparatus and the connection of fire hose. The whole maintenance squad of the Instrument Workshop participated in the competition.



#### Explanation of material properties and practical training of the corresponding protective articles

The staff learned about the hazardous factors of the materials in each workshop, possible injuries during maintenance, and the necessary precautions and preventive measures



## Safety pledge ceremony in the squa

The squad leader oversees the oath-taking by all the staff at the pre-shift meeting held in the shift handover room, workshop meeting room or other places designated by the workshop, making the safety pledge a routine practice of the workshop.



## 3.4.2. Occupational Health

The occupational health of employees has always been a key priority for Daqo. The Company has passed the certification of the ISO 45001 Occupational Health and Safety Management Systems. We strictly abide by the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, the Employers' Occupational Health Surveillance and Supervision and Administration Measures, and other related laws and regulations. To improve the occupational health management system and demonstrate our care for the occupational health of employees, we have formulated a series of internal occupational health management rules, including the Occupational Disease Hazard Prevention Responsibility System, the Occupational Disease Hazard Warning and Notification System, the Occupational Hazard Declaration System, the Occupational Health Education and Training System, the Occupational Disease Hazard Protective Equipment Management System, and the Occupational Disease Hazard Emergency Rescue and Management System. During the Reporting Period, Daqo invested a total of RMB 5,315,500 in labor protection.

### Measures to Protect the Occupational Health of Employees

The Quality Department oversees the monitoring of occupational hazard factors on a monthly basis

We provide annual physical examination plans for employees, including induction examination, on-the-job examination, employment separation examination, etc., and establish the archives on the occupational health of employees.During the Reporting Period, we completed the annual physical examination of all employees

We hired a professional occupational health technical service agency to test the occupational hazard factors in the Company, and issue the test report.

Daqo distributes basic labor protection articles to every employee in accordance with national standards and industry specifications, distributes protective articles based on the conditions of different posts, and conducts training, education, supervision and inspection on the correct use of labor protection articles.

Meanwhile, to ensure occupational health, we have conducted more than 1,500 occupational health trainings for employees exposed to occupational hazards through the year, covering topics such as the laws, administrative rules and regulatory standards on occupational disease prevention and control, occupational health and safety management system, basic knowledge of

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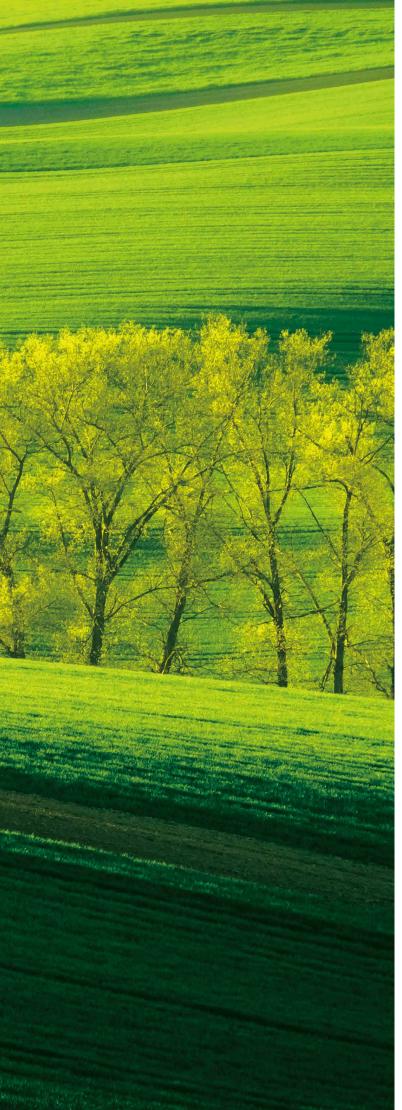
occupational disease hazard prevention and control, occupational health management requirements and measures, occupational disease hazards and prevention and control measures, and maintenance and management of occupational disease protection facilities.

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# **Green Development, Harmony with Nature**

2021 was the first year in the implementation of the 14th Five-Year Plan. As a leader of green energy, Daqo actively responds to the government's call for promoting sustainable socio-economic development. Guided by the concept of green development, we focus on advancing green transformation, prioritize green and low-carbon energy development, and pursue a path of green and high-quality development.



## 4.1 GREEN OPERATION

### 4.1.1. Environmental Management

Dago strictly abides by the Law of the People's Republic of China on Environmental Protection, the Law of the People's **Republic of China on Environmental Impact** Assessment, the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution Induced by Solid Waste, the Law of the People's Republic of China on Water Pollution Prevention and **Control**, and other national laws and policies. We faithfully implement the "six 100%" environmental management requirement of the local government, and regularly commission third-party technical agencies to monitor the discharge of various pollutants, including wastewater, waste gas and waste, in accordance with the requirements of pollution permit management. Meanwhile, we incorporate environmental protection and clean production into our long-term strategy for corporate development and establish clear performance indicators for environmental pollution assessment in our annual production and operation targets. Through the implementation of multiple measures, we continue to reduce the environmental impact of our production and operation, and improve the Company's environmental performance. During the Reporting Period, we invested a total of RMB 25,017,000 in environmental protection, and had no violation of environmental laws and regulations.



Our plants have obtained the certification of the **ISO 14001 Environmental Management Systems** and carried out the internal audits of factories during the Reporting Period. In addition, to further enhance the employees' awareness of environmental protection, we carried out environmental emergency drills and environmental protection trainings to strengthen the building of an environmentfriendly culture in the Company.





## Training of management rules and requirements of online environmental facilities

In June 2021, the Company organized a training on environmental monitoring instruments, preparation of the three reports (commissioning report, networking report, comparison report) for the acceptance assessment of monitoring facilities, construction and daily management requirements of monitoring stations, and standard procedures for processing abnormalities of online environmental data. All the safety management personnel took part in the training, and familiarized with the management requirements of online environmental protection facilities.



### Emergency drill on the leakage of cold hydrogenation synthesis devices



In August 2021, the Company conducted a comprehensive emergency drill on the leakage of cold hydrogenation synthesis devices, which was participated by the members of the emergency response leading group, on-site disposal group, emergency firefighting group, emergency material supply & alert and evacuation group, environment testing group, and medical rescue and logistic support group.

### 4.1.2. Wastewater Management

Daqo strictly abides by the Law of the People's Republic of China on Water Pollution Prevention and other laws and regulations as well as the level-3 standard of the General Standards for Wastewater Discharge (GB8978-1996), and strictly monitors and controls the discharge of wastewater generated from production and operation.

We have adopted the means of classified collection and treatment as well as separation of clean water and sewage. Most of the fluorine-containing wastewater, saltcontaining wastewater, sewage discharged from the circulating water system, domestic sewage and other wastewater generated from daily production and operation are recycled through the circulating water system, and the final wastewater will only be discharged after being treated and meeting the pollutant discharge standards. Meanwhile, the production and domestic wastewater and clean water discharged from the polysilicon devices are recycled by adopting the comprehensive recycling and reuse technology of external wastewater. Through the existing production process devices and public works, plus newly installed process devices, we can reduce the discharge of production and domestic wastewater and clean water by one million tons per year.

#### **Wastewater Treatment**

The salt-containing wastewater gets recycled in the Three Wastes Treatment Center for repeated times, and then, after passing the inspection, transported to the sewage treatment plant in the park by tank truck. The discharged sewage from the water circulation system enters the reclaimed water reuse device for treatment, and the qualified water is reused in the water circulation water system. The concentrated water produced by reverse osmosis is discharged to the sewage treatment plant in the park.

Domestic sewage is treated in a septic tank and then discharged into the industrial park's sewage treatment plant after passing the inspection of the main discharge outlet.

The fluorine-containing wastewater is collected and treated, and then qualified water is reused in the circulating water system. The concentrated water, produced by reverse osmosis, is sent to

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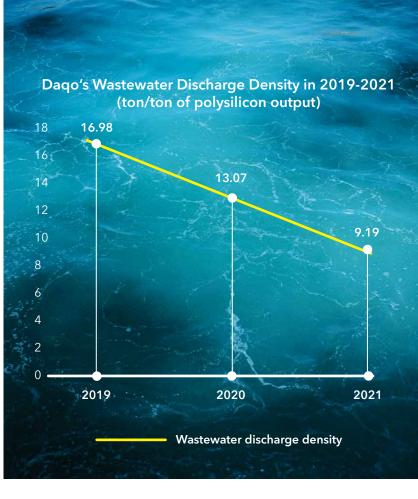
the fluorine-containing wastewater treatment device and discharged through the main outlet after passing the inspection.



In addition, we set the Company's wastewater discharge target, based on the amount of discharge in the previous year and the production plan of the current year, which is implemented after approval by the management board. The target of wastewater discharge we set for 2021 was 1.1 million tons/year, and the actual discharge was 795,900 tons, exceeding this year's target of wastewater discharge reduction. Through the development project of circulating water saving technology, the total amount of wastewater discharge dropped by 20.05% compared with that in 2020, and the wastewater discharge density dropped by nearly 30% compared with that in 2020.

## Development project of circulating water saving technology

The main purpose of the project is to find a technology that can effectively reduce the discharge of circulating water and save the water required for refilling circulating water on the premise of ensuring stable water quality of the circulating water system. This year, we have set the technical direction and picked our cooperation partners based on a series of technical exchanges and demonstrations, and developed and verified new technologies through joint development. Without compromising the quality of circulating water, the test device has achieved the results of 70% reduction in the discharge of circulating water and 65% reduction in the dosage of circulating water agent.



**Prevention and Control**, the **General Emission Standards of Air Pollutants**, and other laws and regulations, and conduct waste gas management in accordance with the **General Emission Standards of Air Pollutants** (GB16297-1996) and other standards. We have installed waste gas treatment equipment, such as dust collectors and leaching towers, and made sure that waste gas can only be emitted into the air after being treated in the pollutant treatment facilities and meeting the pollutant emission standards.

Indicator	Unit	2020	2021
Total amount of wastewater discharge	10,000 tons	101.01	79.59
Wastewater discharge intensity	Ton/ton of polysilicon output	13.07	9.19

#### The Company's data of wastewater discharge during the Reporting Period are as follows:

### 4.1.3. Waste Gas Management

We strictly comply with the Law of the People's Republic of China on Air Pollution

### Measures for waste gas treatment

#### • Emissions and Discharge Compliance

- After hydrogen chloride is generated, it will be recovered by hydrolysis and absorption reaction with chlorosilane after pressurized cooling, or processed through primary water washing + secondary alkali washing and discharged after meeting the emission standard.
- --> After being collected, the particles will enter the bag filter, where they get treated and discharged after meeting the emission standard.
- After nitrogen oxides and fluorides are generated, they will enter the threestage leaching tower, where they get treated through first-stage water washing + second/third-stage alkali spray washing and discharged after meeting the emission standard.
- After the waste chlorine is generated, it will be spray washed in the twostage alkali washing tower and then discharged after meeting the emission standard.

In 2021, in accordance with the environmental protection requirements of the local government in Shihezi and based on the experience of construction management in past projects, we strengthened the dust management before, during and after the project to minimize dust pollution during the project's implementation.

### **Measures for Managing Dust Pollution**

#### Preparatory Stage of construction

- The roads in the factory compound are paved with asphalt to reduce dust.
- The gate area is hardened with cement, and vehicle washing device and drainage ditch are installed at the vehicle exit to ensure that muddy vehicles get washed before entering municipal roads.
- The project is equipped with on-line dust monitoring facilities to monitor the dust in the whole process of project construction.

#### **Construction Period**

- The exposed earthwork in the factory compound is covered with dense mesh net, and lawns are planted in some areas, which has ensured proper dust control and complied with the requirements of environmental protection.
- During the construction of the project, closed shot blasting machine is used to remove the rust of the pipeline and steel, and sand blasting measures are prohibited, so that the dust pollution of the project meets the requirements of environmental protection.

#### Later Stage of Construction

• A third-party property service company has been commissioned to regularly clean the internal roads and surrounding environment of the project in order to meet the requirements of environmental protection.

Indicator	Unit	2020	2021
Nitrogen oxide	Ton	1.00	4.23
Dust	Ton	8.10	6.67

#### The Company's data of waste gas emissions during the Reporting Period are as follows:

#### 4.1.4. Waste Management

We strictly abide by the Law of the People's Republic of China Solid Waste Pollution Prevention and Control and other relevant laws and regulations in conducting waste management orderly. For general solid waste, we transport them to a solid waste landfill for landfill disposal in accordance with the requirements of the local government. For hazardous waste, we set up temporary storage and entrust the subsequent treatment to suppliers and third-party agencies with professional qualifications. During the Reporting Period, the Company had no non-compliant disposal of hazardous waste. During the Reporting Period, to further strengthen employee' awareness of compliance in waste management, we provided training to employees on the types of hazardous waste and hazardous waste management. We also organized emergency drills for on-site handling of hazardous waste leaks to further enhance employees' ability for dealing with similar situations.

## Training on the knowledge about hazardous waste

On May 27, 2021, the Company carried out training on four subjects: laws and regulations related to hazardous waste, introduction of hazardous waste types, eight systems of hazardous waste management, and internal hazardous waste management process, and all safety management personnel as well as the management staff of the temporary warehouse for hazardous wastes and employees of the Procurement Department that have signed agreements on hazardous waste disposal participated in the training. Through the training, the safety management personnel gained a clearer understanding of the management norms, standards and daily management requirements of hazardous waste. Emergency drill for the on-site disposal of hazardous waste leaks



On March 24, 2021, the managers of the Planning and Storage Section of the Production Department, the managers of the hazardous waste storage, the special workers of the area of the Safety and Environment Department, and the safety managers of the neighboring workshops participated in the emergency drill for the on-site disposal of hazardous waste leaks. During the Reporting Period, the solid waste produced by the Company dropped by 7.78% compared to the previous year. The waste data is as follows:

Indicator	Unit	2020	2021
Hazardous waste	Ton	501.70	213.75
General waste	Ton	27,642.39	25,740.50
Integrated utilization	Ton	/	772.65
Landfill	Ton	/	24,967.85
Total amount of solid waste	Ton	28,144.09	25,954.25

## **4.2 RESPONDING TO CLIMATE CHANGE**



ackling climate change is a matter of importance to the sustainability of the Chinese nation and the future of mankind. As an important

participant in the photovoltaic industry, Daqo has actively followed the government's dual-carbon policy. While pursuing green and low-carbon development of our business, we have taken the initiative to participate in the global campaign against climate change.

## 4.2.1. Development Opportunities

Currently, the global challenges of energy shortage and climate anomalies are becoming increasingly prominent. Photovoltaic power generation is an effective means to achieve carbon neutrality and carbon peak. In 2021, China's photovoltaic industry grasped the development opportunities presented by the dual-carbon goals, overcame the impact of the COVID-19 pandemic, severe economic situation and international trade barriers, continued to deepen structural reform on the supply side, and accelerated the intelligent upgrade and innovation of the industry. With a sound overall performance, the industry was off to a good start in the implementation of the 14th Five-Year Plan.



China now has the world's most complete industrial chain for the manufacturing of photovoltaic power generation equipment, and leads the world in both technology level and manufacturing scale. The improvement in the industrial chain of new energy storage and the development of diversified technology routes have provided important underpinning for the global clean and low-carbon energy transition. As countries around the world speed up the efforts to tackle climate change, demand in the photovoltaic market continues to rise. In 2021, China ranked first in the world in the share of global output of polysilicon, PV cells and PV module. Also during the year, China exported over US\$ 28.4 billion of PV

products to more than 200 countries and regions, reducing the cost of clean energy use worldwide.

As an upstream enterprise in the photovoltaic industrial chain, Dago produces high-purity polysilicon products that are essential materials for manufacturing PV modules. This makes us an important link in the photovoltaic supply chain and gives us an indispensable role in maintaining the safety and stability of the photovoltaic industrial chain. The boom of the industry brings development opportunities for the Company, and the huge demands for PV products have made Dago products fastselling goods in the market. On the other hand, given the growing challenge of climate change, it is only foreseeable that downstream enterprises will raise higher requirements on low-carbon growth to us. We will take the higher requirement for sustainable development as an opportunity and motivation for advancing business development, and set higher targets to accelerate green development.

We are committed to the R&D, innovation and continuous upgrading of products to strengthen the foundation for the photovoltaic industry, promote the green transformation of the energy structure in the whole society, and contribute to the fight against climate change. Based on the industry's average production level, each watt of PV module product requires the use of approximately 3 grams of polysilicon as its necessary raw material. In 2021, the Company produced 86,586.6 tons of polysilicon products for PV module manufacturing, which could be used to produce about 28.8GW of PV module products and generate approximately 43.2 billion kWh of clean electricity each year, equivalent to the reduction of 25.22 million tons of  $CO_2$  equivalent in GHG emissions.

#### 4.2.2. Energy Management

We are well aware of the risks and opportunities brought by climate change. While contributing to the green transformation of the energy structure in the whole society, we are committed to pursuing a sustainable and low-carbon path of business development and taking energy conservation and emission reduction as sigificant considersations in our business operation. We strictly abide by national regulations such as the Law of the People's Republic of China on Energy **Conservation**, and consolidate energysaving design, technological renovation and other measures to achieve maximum energy efficiency and reduce energy consumption.

F	
CO2	







### In 2021, we carried out a series of energy-saving retrofitting projects in the production process:





Retrofitting project of deep heat recovery in cold hydrogenation workshop

High-temperature water flash tank retrofitting project of reduction water system 702A

In the past, high-temperature water from the reduction water system was directly used for heat exchange with the distilled hot water, but the waste heat utilization rate was relatively low. In addition, channeling the medium pressure steam condensate directly from the cold hydrogenation unit 833AB to 450A also causes heat loss and increases the generation of plume fog in circulating water, so we added a flash tank in the reduction water system 702A, separating the high-temperature water into two systems, i.e. bell cooling water and sump cooling water, and connected the sump cooling water to the distilled hot water. Part of the bell cooling water heats up the sump cooling water to 125 °C, which is then used in the distilled hot water reboiler, and the other part of the bell cooling water is channeled to the flash tank to produce steam at 0.15 MPa.G for use in the distilled steam reboiler. A new condensate

collection system is installed in 803A, including a new condensate transfer pump, which pumps the collected condensate to the 702A flash tank. After retrofitting, the 702A water system has achieved heat balance and no longer needs steam heating, thus effectively reducing energy consumption. We adjusted the A/B operation mode of the inlet material heat exchanger in the quench tower of the synthesis unit of the cold hydrogenation workshop, from parallel operation with one active and one backup to series operation. After passing through the two-stage heat exchanger, the pipe-layer outlet temperature of the inlet material heat exchanger in the quench tower goes down while the outlet temperature of the shell layer goes up, thus reducing the power consumption of the electric heater.







Exhaust gas recycling project

Installation of waste gas TCS heat exchanger in the waste gas recovery workshop

Medium-pressure steam to low-pressure steam retrofitting project

Before the circulating water heat exchanger of the exhaust gas recovery and condensation system, we added an exhaust gas TCS heat exchanger to allow heat exchange between the exhaust gas of reduction reaction and the TCS sent by the distillation workshop to the reduction workshop. After the heat exchange by the exhaust gas TCS heat exchanger, the heat of the exhaust gas of reduction reaction in the main pipe is recovered to save the use of low-pressure steam. It also reduces the temperature difference between the inlet and outlet of the pipe layer of the circulating water heat exchanger of the exhaust gas recovery and condensation system, and brings down the risk of leakage of the circulating water heat exchanger.

The main purpose of the project is to upgrade the low-quality low-pressure steam produced by the company to high-quality medium-pressure steam for use by various process units and reduce the consumption of medium pressure steam. The main contents: First, checking and verifying the feasibility of replacing the medium-pressure steam heat exchanger with low-pressure steam, and replacing mediumpressure steam with low-pressure steam in the departments where replacement is possible or only requires moderate retrofitting; second, the remaining lowpressure steam is pressurized to high-quality medium-pressure steam through the compressor and directly supplied to the mediumpressure steam heat exchanger of the devices, so as to reduce the consumption of medium-pressure steam.

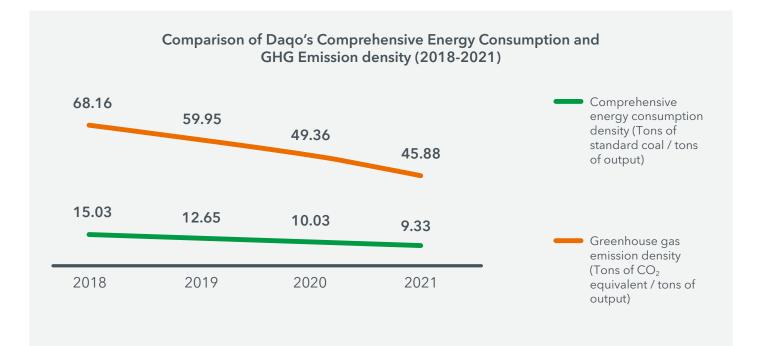
The chlorosilane, hydrogen, hydrogen chloride and other components in the exhaust gas of the reduction furnace, if processed through dry recovery, must be separated by multistage condensation, during which a large amount of cooling is required. At the same time, the separated and purified hydrogen also needs be pressurized. As a result, the refrigeration and hydrogen compression devices consume most of the energy during the exhaust gas recovery process. In order to reduce the energy consumption of the refrigeration and compression units, we optimized and adjusted the exhaust gas recovery process, and integrated the processing capacity and load of the existing refrigeration and hydrogen compression devices, which effectively reduced the energy consumption of the exhaust gas recovery unit.

## The Company's data of energy consumption and GHG emissions during the Reporting Period are as follows:

Indicator	Unit	2020	2021
Diesel	Ton	39.51	47.48
Purchased electricity	KWh	4,996,330,000	5,195,724,430
Steam	GJ	4,719,663.00	4,952,641.46
Direct energy consumption	Ton of standard coal	57.57	69.18
Indirect energy consumption	Ton of standard coal	775,091.13	807,546.29
Comprehensive energy consumption	Ton of standard coal	775,148.70	807,615.47
Comprehensive energy consumption density	Ton of standard coal / ton of polysilicon output	10.03	9.33
Direct (Scope 1) GHG emissions	Ton of $CO_2$ equivalent	124.25	149.33
Indirect (Scope 2) GHG emissions	Ton of $CO_2$ equivalent	3,815,203.73	3,972,020.40
Total GHG emissions	Ton of $CO_2$ equivalent	3,815,327.98	3,972,169.73
Greenhouse gas emission density	Ton of CO <sub>2</sub> equivalent / ton polysilicon output	49.37	45.88

Our comprehensive energy consumption density and GHG emissions density have been decreasing year by year. Compared to 2020, the Company's GHG emissions density in 2021 dropped by 7.1%, while the overall energy consumption density dropped by 7%. We constantly pay attention to the energy consumption and energy consumption density of our products, and will take multiple measures to reduce the energy consumption density and GHG emissions density of our products.

#### Comparison of Comprehensive Energy Consumption and GHG density



## **4.3 RESOURCE MANAGEMENT**





mbracing the corporate vision of "building a global company with an everlasting business", Daqo is committed to the sustainable recycling

of resources. By optimizing the resource management system and cultivating the employees' awareness of resource conservation, we continue to assume the social responsibility as a major enterprise.

#### 4.3.1. Water Resources Management

Water is a natural resource indispensable to human development and the material basis for the survival of humanity and all living creatures. Dago attaches high importance to the issue of water resources and promises to reduce the use of water resources, improve the efficiency of water use in production and protect water resources with concrete actions. We have introduced a series of technological transformation projects including the factory-wide sewage grading and recycling project, the highsalt wastewater (sodium chloride) recycling project, and the reclaimed water recycling project to recover and recycle water resources through technical improvements, thereby continuously reducing water consumption in our production.

During the Reporting Period, we increased investment in water recycling devices to fully prepare for water recycling in our future production operations.

#### Water resources recovery and treatment device

In 2021, during the construction of Project 4B, we concurrently built a set of "MVR evaporation and crystallization device for high-salt sewage" to further purify and remove the impurities in the high-salt sewage generated, so as to realize sewage recycling. With an investment of approximately RMB 13 million, the project is scheduled to be put to use in February 2022. In addition, we will add a new recycled water treatment plant and three sand filters this year, with a planned investment of about RMB 1.5 million and the capacity for processing 90 cubic meters of recycled water per hour, which is scheduled to be put into operation in January 2022.

The Company's data of the use of water resources during the Reporting Period as follows:

Indicator	Unit	2020	2021
Total water consumption (all coming from municipal water)	1,000 tons	4,905.45	5,622.30
Water consumption density	1,000 tons/tons of polysilicon output	0.06	0.06
Total amount of circulating water	10,000 tons	66,751.20	66,576.00
Total amount of reused water	ed water 10,000 tons		206.90

#### 4.3.2 Material Management

Daqo attaches great importance to the management and use of materials, and takes into account the factors of environmental protection and energy efficiency in the selection of materials. At the same time, the **Daqo Management System for the Quality Control of Finished Products** also covers the control of abnormal materials. The main materials used by Daqo include silicon ingots, silicon powder, hydrogen, hydrochloric acid, silicon tetrachloride and quartz sand. We actively use the material recovery process to reduce silicon consumption, address the problem of resource waste, and minimize the impact on the environment, in an effort to put the Company on a sustainable path.



The Company's data of the use of water resources during the Reporting Period as follows:

Indicator	Unit	2020	2021
Silicon powder	Ton	84,077.24	95,883.20
Hydrogen	10,000 m <sup>3</sup>	1,824.12	2,178.19
Hydrochloric acid	Ton	8,945.10	7,986.00



# 5

## Active Participation in Charity Works

Over the years, Daqo has vigorously promoted the charity spirit, continuously increased investment in charity programs, gathered a powerful force for good with concrete actions, and embedded the concept of giving back to society and fulfilling corporate social responsibility into the Company's business. We have joined hands with internal and external partners to carry out charity activities and give back to society with a sense of responsibility. During the Reporting Period, we made a community investment of RMB 1.015 million and donated 36.5 tons of disinfectant to enterprises and public institutions in Shihezi.



### 5.1 SUPPORT FOR LOCAL FARMERS IN RURAL VILLAGES

Revitalizing the industries of rural areas is a vital project of the rural revitalization strategy, and an area of social responsibility that Daqo continues to focus on. We actively champion the innovative concept of poverty alleviation through consumption, and promote the action of helping farmers through consumption. We are dedicated to promoting poverty alleviation through consumption campaigns to create a social atmosphere of "participate, support and advocate by all".

#### Support for the consumption of agricultural products





October is the harvest season of agricultural products. However, due to the pandemic and other factors, the marketing of agricultural products in many places faced severe difficulties. Upon learning that the farmers of Yingawati village in Boshikeran township, Kashgar city, were having a big problem selling their Munage grapes, Daqo immediately contacted the local government official at the town. In order to help the farmers overcome the challenge and undertake our corporate social responsibility, we purchased some of the unsold grapes to support the local farmers get out of the difficulties.

## **5.2 SUPPORT FOR LOCAL EDUCATION**

Daqo sees education as the foundation for a vibrant society and an essential part of its corporate social responsibility. Together with our external partners, we are committed to cultivating the self-esteem among the young people, and encouraging them to embrace the ideal and conviction of striving for social progress, consciously safeguard the dignity and interests of the country and the nation, and contribute their part to the country's modernization drive.

#### Movie opportunity for left-behind children





On October 24, 2021, Daqo joined hands with Bai Yang Public Welfare to hold a public welfare activity -Bringing Love to Children with Movies. Some 40 volunteers invited over 60 left-behind children from the local Children's Home to the cinema to watch a movie together.

#### **5.3 CARE FOR CHILDREN**

Children are the future of the world. They are also the group that Daqo will do its utmost to care for and support. In 2021, we donated RMB 1 million to Shihezi Children's Home and RMB 15,000 to Shihezi Vocational Technical College to support the protection and development of children. At the same time, Daqo is committed to being a qualified "corporate citizen". While fulfilling our social responsibility and giving targeted assistance to local communities, we are also actively working with global charity partners to advance the public welfare campaigns.

## Appeal to employees' participation in the UNICEF monthly donation campaign



In December 2021, Daqo called on its employees to actively participate in the UNICEF monthly donation campaign and join the global cause of child protection and survival, education rights, and gender equality.

# 6 APPENDIX

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