



2017

Social Responsibility Report



About this Report



- The "M" element represents the leading role of SINOMACH in the machinery industry. The "M" image also indicates the Group's ambition to revitalize China's machinery industry and become a major player in the world.
- Based on the stable triangle, the logo, with the block structure as design element, fully shows SINOMACH's feature as a machinery enterprise, and the sincere, prudential and practical corporate image of SINOMACH.
- In the logo, the Chinese character "人" ("human being" in English) highlights SINOMACH's people-oriented philosophy. With talented people gathering together, it contributes to the future development of the machinery industry.
- The triangular shape symbolizes a majestic mountain. The "M" element looks like an eagle spreading its wings and soaring at the peak, which implies that SINOMACH challenges itself unceasingly and seeks for new development.

Reporting Period

January 1, 2017-December 31, 2017. The Report also includes additional contents and data that predates the stated reporting period.

Reporting Cycle

This Report is annually published and it is the eighth social responsibility report released by China National Machinery Industry Corporation (hereinafter referred to as "SINOMACH").

Reporting Scope

China National Machinery Industry Corporation headquarters and its subsidiaries (see "About Us" for organizational structure).

Reporting Data Sources

All data in this Report comes from SINOMACH's statistical reports, financial reports and other official documents, and has been audited by relevant departments.

Compilation Conformance

Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities by Stateowned Assets Supervision and Administration Commission of the State Council (the SASAC)

Sustainability Reporting Guidelines (G4) by Global Reporting Initiative (GRI)

ISO 26000 - Guidance on Social Responsibility (2010) by International Organization for Standardization (ISO)

GB/T 36001 Guidance on Social Responsibility Reporting by General Administration of Quality Supervision, Inspection, and Quarantine of China (AQSIQ) and Standardization Administration of China

Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises(CASS-CSR4.0) by Chinese Academy of Social Sciences (CASS)

Guidelines on Social Responsibility of Chinese Industrial Enterprises and Industrial Associations by China Industrial Economic Federation

References

In this Report, "SINOMACH", "Group Corporation", "the Group", "the Company", or "We" refer to China National Machinery Industry Corporation.

Access to this Report

This Report is prepared and released in both Chinese and English versions, and is available in paper and electronic formats. If you need the paper version, please contact us. You may visit our website to download the online version. Our official website: http://www.sinomach.com.cn

China National Machinery Industry Corporation

Address: No.3 Danling Street, Haidian District, Beijing

P.C: 100080

Contact Person: He Yuan, Party Committee Department Tel.: 86 - 10 - 82606741

Fax: 86 - 10 - 82688724

E-mail: heyuan@sinomach.com.cn



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Message from the Chairman



Chairman Ren Hongbin

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2017 is the 20th anniversary of the founding of SINOMACH. In retrospect, we have kept peace with the times, especially China's reform and opening-up and the economic globalization. We have experienced an extraordinary journey and emerged as a major player in the industry. Over the years, SINOMACH has grown from a traditional management-based group to a modern enterprise with international influence which is playing an important role in the world economy.

Over the past 20 years, we have remained true to our original aspiration and kept forging ahead with our hard work. We have formed the core value of "work together, win together" and established the corporate mission "to guide the development of the machinery industry and promote the progress of the human society" and the vision of "building a responsible, value-creating, innovative, green and happy SINOMACH, and becoming a world-class enterprise with international competitiveness". These are solemn declarations, firm commitments, and clear guidelines for our commitment to sustainable development.

Implementing the strategy of "reshaping a new SINOMACH overseas" to serve the Belt and Road Initiative. As a pioneer in "going global", we have been striving to cooperate with local counterparts and companies in countries and regions along the Belt and Road and around the world. SINOMACH constantly promotes the "going global" of its products, technologies, standards, and services, and participates in the infrastructure construction and industrialization in countries along the Belt and Road. A large number of projects that have been completed or under construction, such as China-Belarus Industrial Park, Tatai Hydropower Station, and Thar Coal Power, have made important contributions to the development of local economy and

Being a pioneer to maintain the momen-

tum for innovation. Innovations such as the 80,000-ton die-forging press, the 12,000-ton aircraft aluminum alloy thick plate tension stretcher, the unmanned tractors, the cloud service platform for agricultural mechanization, and the all-digital spinning system highlight our innovative capabilities in various fields, as well as the continuous improvement of our integrated innovation capabilities. With these innovations, we have continued to lead the development of science and technology in the industry. In 2017, SINOMACH received 360 provincial and ministerial-level and national industrial awards, applied for 1990 patents, and hosted or participated in the formulation and revision of 734 standards.

Deepening enterprise reform to make new progress with the means of "addition, reduction, multiplication and division".

"Addition": We restructured with CHTC to strengthen the advantages of SINOMACH in manufacturing and other fields. "Reduction": We integrated the Group's internal resources to reduce costs, and continuously improved the quality of our operations. "Multiplication": We strengthened innovation in areas such as technology, management, marketing and business models, and gave play to the role of "EPC

driven by investment" step by step. "Division": We continued with the removal of backward and excess production capacity, increased labor productivity and return on capital, and made new progress with the controlling of receivables and inventories and the governance of enterprises which had been running in the red. In 2017, CEI successfully completed the reform of mixed ownership and employee shareholding, and became one of the first pilot central SOEs to complete employee shareholding reform.

Practicing the concept of green development to facilitate the construction of a Beautiful China. In the face of the current global challenges, such as destruction of natural resources and deterioration of the ecological environment, we adhere to the concept of green and low-carbon development and are committed to integrating environmental protection with corporate development strategies and business operations. At the same time, with a clear understanding of the characteristics of the industry, we leverage our advantages in environmental protection research and production, strengthen technological innovation, and vigorously promote the use of new energy. Through green design, green production, and green projects, we continue to make contributions to the green development of domestic machinery industry and the Beautiful China while improving our own environmental performance. In 2017, we increased our investment in environmental protection, and our major energy consumption and emission indicators continued to decline.

Sharing development results to improve

employee' well-being. We always put our staff first and adhere to the concept that "the corporate development is by the people and for the people". We actively protect the rights and interests of employees to build a harmonious labor relationship. We focus on the career development of our employees and stimulate their work enthusiasm. We care for the lives of employees and provide them with a warm and comfortable environment. We

are committed to providing employees with better jobs and lives so that they can share the development results of the Company and have a greater sense of acquisition, well-being and security.

Promoting people's well-being to become a better global corporate citizen.

In Gushi and Huaibin in Henan, Chaotian in Sichuan, and Pinglu in Shanxi, we took poverty alleviation actions and worked hard to create a better life for the people in poor areas. We provided disaster relief at the front-line of landslides in Mao County, Sichuan, in the disaster area of the earthquake in Jiuzhaigou, and in the flood-stricken area in Sri Lank, making every effort to help the people in the disaster areas rebuild their homes, and have set up a responsible corporate image. With the Umbrella Sharing campaign, we sheltered people from the cold rain and sent positive energy to society in the rainy season of 2017. At the 2017 World Economic Forum held in Davos, a piece of maliu embroidery created by villagers of Yulin Village, Chaotian, Sichuan, where SINOMACH have been carrying out poverty alleviation actions, was given to Professor Klaus Schwab who was founder and executive chairman of the World Economic Forum by Xiao Yaging, director of SASAC. The gift was highly praised by Professor Klaus Schwab and won recognition of the world.

We undertake new missions in the new era and will create new accomplishments in the new journey. Looking ahead to 2018, we will stick to new development concepts, and comprehensively promote innovation and development, deepen enterprise reform, in accordance with requirements of high-quality development and by centering around supply-side structural reform. In the future, we will work tirelessly to improve the quality and efficiency for the development of SINOMACH and to build a world-class company with global competitiveness, thus contributing to the revitalization of China's machinery industry and the realization of Chinese Dream of national reju-

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Social Responsibility Performance

Performance					
Ferformance	2013	2014	2015	2016	2017
Total assets (RMB Billion)	234.6	253.13	261.43	272.02	381.56
Operating revenue (RMB Billion)	242.4	249.15	220.8	214.16	288.17
Asset-liability ratio (%)	74.6	74.9	69.8	68.3	67.9
Equities attributable to equity holders of the parent company (RMB Billion)	41.84	45.46	57.74	62.06	68.33
Performance assessment by SASAC (level)	А	А	А	А	А
Fortune Global 500 (ranking)	278	288	293	334	256
ENR Top 250 International Contractors (ranking)	25	25	27	23	31
Scientific research investment (RMB Billion)	4.55	4.40	4.62	4.79	6.202
Professional and technical employees	48,322	49,134	48,043	46,533	55,043
Academicians	2	2	4	4	4
Completed national-level research pro-	70	71	85	74	76

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Scientific research investment (RMB Billion)	4.55	4.40	4.62	4.79	6.202
Professional and technical employees	48,322	49,134	48,043	46,533	55,043
Academicians	2	2	4	4	4
Completed national-level research projects	70	71	85	74	76
Awards of provincial or ministerial level or above	347	329	306	352	360
National patents	1,184	1,323	1,415	1,453	1,542
Formulation and revision of national industry standards	889	754	659	725	734
Commercialization rate of research results (%)	>95	>95	>95	>95	>95

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No.	No.



Performance	2013	2014	2015	2016	2017
Environmental protection input (RMB Million)	11.8	13	19	23.82	54.45
Total energy consumption (10,000 TCE)	34.2200	28.5700	25.8358	60.3680	105.5664
Overall energy consumption per RMB 10,000 of operating revenue	0.0056	0.0039	0.0036	0.0040	0.0032
Overall energy saving (10,000 TCE)	6.69	13.30	18.77	0.70	19.73
SO ₂ emission (Ton)	720.3	599.7	530.7	566.3	4235.4
COD emission (Ton)	256.90	44.11	38.84	85.35	4082.48

Note: From 2017, the environmental performance of CNEG and CHTC are included in the environmental performance appraisal of SINOMACH.

	2013	2014	2015	2016	2017
Total number of employees	109,245	109,900	111,603	97,516	139,017
Labor contract signing rate (%)	100	100	100	100	100
Work safety input (RMB Million)	697.59	462.59	485.99	497.49	507.56
Work safety hazards fixing rate (%)	99.39	99.30	100.00	99.44	99.56
Major safety accidents (Cases)	0	0	0	0	0
Employees seriously injured in accidents (Number)	2	2	0	0	1
Dead employees (Number)	0	3	2	1	0
Employees' physical examination rate (%)	100	100	100	100	100
Major complaints from partners (Cases)	0	0	0	0	0
Total taxation (RMB Billion)	8.99	11.46	9.74	9.553	13.059

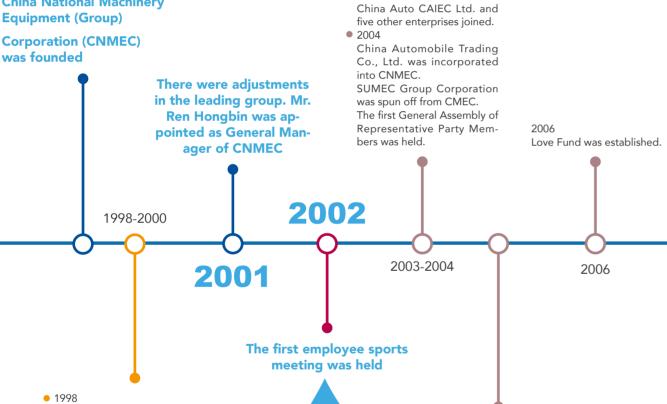
SINOMACH's Development in the past 20 years (1997-2017)

On January 28, 2017, SINOMACH celebrated its 20th anniversary. For 20 years, SINOMACH has inherited the profound culture and carried the mission of China's machinery industry. Along the way, we have experienced changes and innovations, got through the storms, and enjoyed the sunshine.

January 28, **1997**

China National Machinery Equipment (Group)

was founded



Serveral companies, including China Perfect Machinery Industry Corp. Ltd., became the first batch of subsidiaries of CNMEC.

1999

Beijing Materials Handling Research Institute and other 20 scientific research institutes were incorporated into CNMEC.

2000

TRIED and another scientific research institute, Design Research Institute and seven other survey and design companies joined CNMEC.

strategy of "regarding project contracting as the main body, and domestic & nent & production as two ings" was put forward

2005

SINOMACH Finance Co.,

The first SINOMACH Science

and Technology Forum was

Ltd. was founded.

Luoyang Bearing Sciences and Technology Co., Ltd. (ZYS) was listed, which was the first listed company in the Group

CNMEC was renamed "China National Machinery Industry Group Company" (SINOMACH).

AE and CNAICO were established. The Group's headquarters was relocated to Zhongquancun.

SINOMACH in three

The business structure

SINOMACH donated money and materials worth RMB 4.586 million to regions stricken by Wenchuan earthquake.

The business volume broke RMB 100 hillion for the first time

SINOMACH was listed among Top 100 companies in the machinery industry and ranked first for the first time.

YTO Group Corporation was incorporated

2008

2007

China Foma

(Group) Co., Ltd.

and China Ocean

Aviation Group Inc.

were incorporated

world-class er

SINOMACH was listed among Fortune Global 500 for the first time and ranked 435th.

SINOMACH Capital Management Corporation was established.

China SINOMACH Heavy Industry Corporation was established.

January 28 was set "SINOMACH Loving Day".

Chairman Ren Hongbin was elected as an alternate member of the CPC Central Committee.

The business volume broke RMB 200 billion for the first time.

The objective of building a "responsible, value-creating, innovative, green and happy SINOMACH" was put for-

The requirement of "quality growth" was put forward.

2011-2012

SINOMACH Capital Holding Co., Ltd. was established.

of "starting the busines

building an international

The "four-wheel

SINOMACH Intelligence Technology Co., Ltd. was founded.

2016

Chairman Ren Hongbin was appointed Chairman of Infrastructure Working Group in B20 Hangzhou

Chairman Ren Hongbin was appointed as Chairman of Infrastructure Working Group.

"Danling spirit" was put forward



SINOMACH and China National Erzhong Group Co. were jointly reorganized

2013

SINOMACH Precision Industry Co., Ltd. was established.

2014 China-Belarus Industrial Park was founded.

January 28, 2017

The 20th anniversary of the founding of SINOMACH

The Group was renamed "China National Machinery Industry Corpora-The first session of the first term o

2009-2010

Board of Directors was held. China Academy of Agricultural Mechanization Sciences was incorporated

into SINOMACH. SINOMACH was evaluated as Grade-A State-owned enterprise by the SASAC.

2010

The first SINOMACH Corporate Social Responsibility Report was released.

The goal of "rebuilding SINOMACH in three years" was outperformed in advance.



Mind Drives The World



About Us

Company Profile

Established in January 1997, China National Machinery Industry Corporation (SINOMACH) is a key stateowned enterprise directly under the central government and one of the Fortune Global 500 companies. Based in Zhongquancun, Beijing, China's Silicon Valley, SINOMACH has about 160,000 employees, nearly 40 secondary wholly-owned and holding subsidiaries, 12 listed companies and more than 300 overseas service organizations.

SINOMACH is a diversified, international and comprehensive group in equipment industry dedicated to providing quality global services. The four main businesses are mechanical equipment R&D and manufacturing, project contracting, trade and services, and finance and investment. These businesses cover key industries of the national economy, including mechanics, energy, transportation, automobiles, light industry, ship building, metallurgy, construction, electronics, environmental protection and aerospace. Our markets cover more than 170 countries and regions.

For years, SINOMACH has been promoting further improvement and reconstruction of its core competence through technology and management innovation. By accelerating the pace of "Going Global" and deepening strategic transformation, SINOMACH has changed from a traditional management-oriented state-owned enterprise (SOE) to a modern enterprise with relatively strong competitiveness, and it has become a large-scale centrally-administered SOE with a wide coverage, a complete business chain and strong capacity for comprehensive research and development.

SINOMACH adheres to the corporate philosophy of "work together, win together", and is devoted to developing the corporate culture of "harmony". Centering on the two core business sectors of equipment manufacturing and modern manufacturing services, the Group strives to build a world-class enterprise with international competitiveness, and become a pacemaker in China's machinery industry as well as the driving force for the progress of human civi-

Number of employees

Number of secondary wholly-owned and holding enterprises

Number of listed companies

Number of overseas service organizations

Corporate Governance

SINOMACH is a solely SOE registered in accordance with the Company Law of the People's Republic of China, the Law of the People's Republic of China on State-owned Assets in Enterprises and other laws and regulations. The SASAC performs duties as the contributor of SINOMACH according to law upon the authorization of the State Council. According to Interim Regulations on the Board of Supervisors in State-owned Enterprises, the State Council dispatches a Board of Supervisors to the Group to supervise the maintenance and increase of the value of state-owned assets in the Group.

SINOMACH has established the Board of Directors as the decision-making body, which plays a crucial role in corporate governance and determines key issues of the reform and development of SINOMACH.

SINOMACH strictly follows the spirit of the 19th CPC National Congress and Work Conference on Party Building in State-owned Enterprises, and continuously strengthens the unification of Party leadership and corporate governance. It has made clear and strengthened the statutory position of the Party organization in SINOMACH's corporate governance structure, and ensured that the Party organization can have a more systematized, institutionalized and materialized impact on corporate governance.

Board of Directors

Ren Hongbin Chairman **Shi Ke** Vice Chairman **Xu Jian** Director

Zhang Lailiang Outside Director **Wu Xiaogen** Outside Director **Gao Fulai** Outside Director **Sheng Shiying** Outside Director

Liu Zuqing Employee Director

Senior Management

Ren Hongbin

Deputy Secretary of the Party Committee and Chairman

Shi Ke

Secretary of the Party Committee and Vice Chairman

Xu Jian

Deputy Secretary of the Party Committee and General Manager

Zeng Xiangdong

Member of the Standing Committee of the Party Committeeand Deputy General Manager

Wu Xiaohui

Member of the Standing Committee of the Party Committee and Deputy General Manager

Bai Shaotong

Member of the Standing Committee of the Party Committee and Deputy General Manager

Luo Jiamang

Member of the Standing Committee of the Party Committee and Chief Accountant

Ding Hongxiang

Member of the Standing Committee of the Party Committee and Deputy General Manager

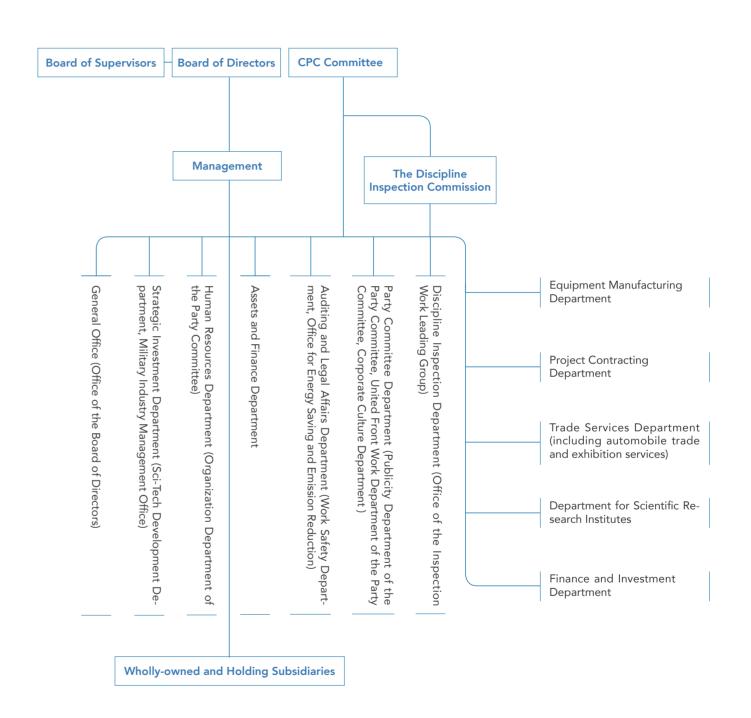
Liu Jingzhen

Member of the Standing Committee of the Party Committee and Deputy General Manager

Lei Guanghua

Member of the Standing Committee of the Party Committee and Secretary of Commission for Discipline Inspection

Organizational Structure



Corporate Culture



Corporate Mission

To guide the development of the machinery industry and promote the progress of the human society



"Harmony" Culture

Harmonious co-existence, harmony in diversity



Core Value

Work together, win together



Corporate Vision

To be a world-leading integrated enterprise in equipment industry



Corporate Spirits

Integrity, inclusiveness, excellence



CSR Philosophy

To lead the green innovation in the machinery industry To dedicate to sustainable social development To create the future of the machinery industry together

Corporate Strategy

Development Goals

SINOMACH continues to top the list of China's Top 100 Enterprises in Machinery Industry, and rank middle among the Fortune Global 500.

Overall Orientation

SINOMACH persists in quality growth for building a stronger, larger and better enterprise and tries to realize the comprehensive development driven by manufacturing, engineering, trade and capital. We try to transform ourselves into a state-owned investment company, and lay a solid foundation for building a world-leading integrated enterprise with innovative capability and international competitiveness in equipment industry.

Business Orientation

SINOMACH targets two main areas "equipment machinery and modern manufacturing service" and four business sectors" equipment R & D and manufacturing, project contracting, trade and services, finance and investment".

Key Task

- Implement innovation-driven strategy to increase development momentum
- Continuously deepen reforms to vitalize growth and development
- Promote structural adjustment to accelerate transformation and upgrading
- Focus on improving quality and efficiency to raise the level of development
- Expand open cooperation to provide broad space for further growth
- Enhance quality brands to expand corporate influence

Safeguards

- Strengthen Party building
- Enhance capital operations
- Reinforce talents team building

- Promote information construction
- Focus on risk management Do a good job of organiand control
 - zational implementation

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Global Business Layout

By the end of 2017, SINOMACH has 37 secondary wholly-owned and holding enterprises, 12 listed Companies, and established more than 300 overseas service organizations.

Secondary wholly-owned and holding enterprises

	adiy Wilony Ov
China HiTech Group Corporation	CHTC
China Machinery Engineering Corporation	CMEC
China CAMC Engineering Co., Ltd.	CAMCE
China Foma (Group) Co., Ltd.	CFMC
China Ocean Aviation Group Inc.	COAGI
China Geo-Equipment Corporation	CGE
China Machinery Industry Corporation	SINOCONST
China National Machine Tool Sales and Technical Service Corporation	CNMTC
China National Heavy Machinery Corporation	СНМС
China National Automation Control System Corp	CACS
China SINOMACH Heavy Industry Corporation	SINOMACH HEAVY INDUSTRY
SINOMACH Finance Co., Ltd.	SINOMF
SINOMACH Automobile Co., Ltd.	SINOMACH AUTO
China Machinery international Corporation	SINOMACHIN
SINOMACH Capital Management Corporation	SINOMACH CAPITAL
SINOMACH Capital Holding Co., Ltd.	SCHC
China Academy of Agricultural Mechanization Sciences	CAAMS
China IPPR International Engineering Co., Ltd.	IPPR
SINOMACH Science and Technology Research Institute Co., Ltd.	SINOMAST

China National Erzhong Group Co.	CNEG
YTO Group Corporation	YTO
SUMEC Group Corporation	SUMEC
China Perfect Machinery Industry Corp.,Ltd.	CPF
China United Engineering Corporation	CUC
China Automobile Industry Engineering Corporation	AE
SIPPR Engineering Group Co., Ltd.	SIPPR
Shenyang Academy of Instrumentation Science Co., Ltd.	SAIS
Hefei General Machinery Research Institute	HGMRI
Lanpec Technologies Limited	LANPEC
Luoyang Bearing Science and Technology Co., Ltd.	ZYS
Tianjin Research Institute of Electric Science Co., Ltd.	TRIED
China National Electric Apparatus Research Institute Co., Ltd.	CEI
SINOMACH Intelligence Technology Co.,Ltd.	SINOMACH INTELTECH
Jinan Foundry and Metalforming Machinery Research Institute Co., Ltd.	JFMMRI
Chongqing Materials Research Institute Co., Ltd.	CIMRI
China National Heavy Machinery Research Institute Co., Ltd.	SINO- HEAVYMACH
Guilin Electrical Equipment Scientific Research Institute Co., Ltd.	GLESI

Listed Companies



Note: YTO was listed on Hong Kong Exchanges and Clearing Limited, and Shanghai Stock Exchange.

Roles in Social Organizations

China Machinery Industry Federation (CMIF)	Vice Chairman Member
China Enterprise Confederation (CEC) China Enterprise Directors Association (CEDA)	Vice Chairman Member
China Chamber of International Commerce (CCOIC)	Chairman Member
China International Contractors Association (CICA)	Vice Chairman Member
China Chamber of Commerce for Import and Export of Machinery and Electronic Products (CCCME)	Vice Chairman Member
China Mechanical Engineering Society (CMES)	Deputy Director-General Member
China-Europe Association for Economics & Technical Cooperation	Deputy Director-General Member
The Shanghai Cooperation Organization (SCO) China Business Council	Standing Council Member
Association for Relations Across the Taiwan Straits	Council Member
China Machinery Enterprise Management	Deputy Director-General Member
China Association of International Engineering Consultants (CAIEC)	Chairman Member
China National Association of Engineering Consultants (CNAEC)	Chairman Member
China Exploration & Design Association (CEDA)	Deputy Director-General Member
China Association for Engineering Construction Standardization (CECS)	Deputy Director-General Member
China Association of Plant Engineering Consultants (CAPEC)	Deputy Director-General Member
China Association of Agricultural Machinery Manufactures (CAAMM)	Chairman Member
China Machinery Industry Education Society (CMIES)	Deputy Director-General Member
China Association of Work Safety	Standing Council Member
Machinery Industry Branch of the Accounting Society of China (ASC)	Chairman Member
Accounting Society for Foreign Economic Relations & Trade of China (ASFETC)	Standing Council Member
Society of Automotive Engineers of China (SAE-China)	Deputy Director-General Member
China Association of Automotive Manufactures (CAAM)	Vice Chairman Member
China Auto Talents Society	Deputy Director-General Member
China Association of Machinery Industry Culture(CAMIC)	Vice Chairman Member
China Electrotechnical Society (CES)	Standing Council Member
China Machinery Industry Auditing Society (CMIAS)	Vice Chairman Member
Electric Power Equipment Branch of the China Chamber of Commerce for Import and Export of Machinery and Electronic Products	Vice Chairman Member
Machinery Branch of the China Supervision Society	Vice Chairman Member
The China Association for Labor Studies	Standing Council Member

Honors and Awards in 2017



ENR Top 250 International Contractors

31 st



Performance Assessment for central SOEs under SASAC for 9 consecutive years

Class A





China's Top 100 Enterprises in the Machinery Industry

1 st



Fortune Global 500

256 th



China's biggest auto trade and service provider

1_{st}



China's Import and Export Enterprises in the Machinery Industry

st



China's Top 500 Foreign Trade Enterprises

20 th



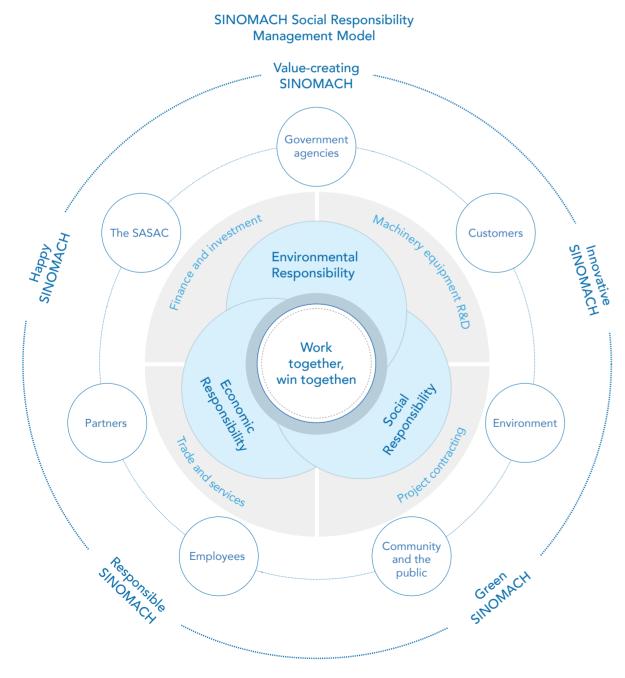
ERN Top 225 International Design Firms

64 th

Social Responsibility Management

Social Responsibility Management Model

SINOMACH continues to raise awareness and deepen understanding of corporate social responsibility and adheres to the core value of "work together, win together" to build a responsible, value-creating, innovative, green and happy SINOMACH by focusing on the four major business sectors of "equipment R&D and manufacturing, project contracting, trade and services, and finance & investment". We endeavor to create value for stakeholders and are committed to achieving harmonious and sustainable development of the Company, nature and society.



Organizational System for Social Responsibility Management

SINOMACH gradually establishes and improves organizational system for social responsibility management in organizational structure, functions, operation mechanism, etc., and makes it cover the headquarters and various branches and subsidiaries. We have carried out the social responsibility work step by step, and continuously integrate social responsibility concepts and requirements into the Company's strategy, business operation, daily management and corporate culture.

SINOMACH Organizational System for Social Responsibility Management



Social Responsibility Management Promotion

Strengthening social responsibility capability building

- Regularly organizing the promotion, communication and training on social responsibility to improve employees' understanding and awareness of social responsibility and their ability of social responsibility management.
- Inviting external consulting agencies and experts to provide intellectual support for the social responsibility work of the Group

Conducting research on social responsibility

- Timely finding our disadvantages in social responsibility practices and make improvements by comparing with advanced enterprises' practices in social responsibility management
- ► Conducting researches on social responsibility to explore new management approaches and models

Building social responsibility brand

- Building a responsible brand inside the Group through the media channels, like corporate journals and WeChat account
- Presenting our responsible image to the society through mainstream media

Expanding social responsibility communication

- Participating in the forums and seminars of professional organizations, such as Chinese Academy of Social Sciences and China WTO Tribune
- Carrying out social responsibility communication with peer companies
- ▶ Participating in specific survey on social responsibility of the SASAC

Social Responsibility Material Topics Analysis

SINOMACH identifies material topics that are of importance to the company's sustainable development in accordance with national policies, industrial characteristics, international and Chinese social responsibility standards and the Group's practical conditions. Moreover, SINOMACH keeps improving and upgrading to provide decision-making reference to the social responsibility management and practice of the Company.

Material topics identification

Based on the principles of "sustainability context" and "stakeholder inclusiveness" as well as information from multiple resources, SINOMACH lists material topics and defines their scopes and boundaries.

References

Macro-background

National policies

Concerns of the media and the public Industrial development trends

Scientific research reports

Strategic development planning

Development goals, strategies, policies, risk analysis and KPI performance assessment report

Stakeholder communication

Interviews with functional departments, investigation and surveys in subsidiaries

Policies and voluntary standards

- · Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Re-
- · GB/T 36001 Guidance on Social Responsibility Reporting
- · Guidelines on Social Responsibility of Chinese Industrial Enterprises and Industrial Associations
- · Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0)
- · Sustainability Reporting Guidelines (G4)
- · ISO 26000 Guidance on Social Responsibility (2010)

Main Topics

- Transformation and upgrading
- Technological innovation
- Law-abiding behaviors
- Environmental protection
- Employees' development Customer services
- Social welfare
- Industrial development
- Risk management and con-
- Sound operation
- Corporate governance
- Product quality
- · Employees' rights and in-
- Work safety
- Community development
- Partners and cooperation

Prioritization

By analyzing the importance to the company's sustainable development and to stakeholders, SINOMACH prioritizes material topics from economic, environmental, and social aspects.

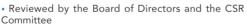


- Deciding the degree of disclosure
- Prioritizing the topics



Topics review





- Reviewed by business departments
- Reviewed by external agencies

Continuous improvements

Continuously optimizing and improving the

Setting new performance targets

material topics based on previous reviews

- Initiating new CSR projects
- Communicating with stakeholders

Stakeholder Communication and Involvement

Sta	akeholders	Expectations and Demands	Communication Approaches	Practices
Д	Governments	Supporting macro-regulation Employment promotion Tax payment according to law Local economic development promotion	 Top management meetings Communications and exchanges Information reporting Conferences participation 	 Job creation Tax payment Social wealth creation Local infrastructure improvement Local industries development
<u>m</u>	SASAC	Compliance with laws and regulations Value maintenance and appreciation of assets Work safety Environmental protection	 Feature report Information reporting Conferences participation Company announcement 	Lawful and trust-worthy operation Sound development Enhanced work safety management Ecological environment protection
8	Community, the Public and NGOs	 Improving community environment Respecting community culture Supporting public welfare 	· Community publicity · Community communication meeting · Community seminar	· Participating in community building · Social welfare actions
	Customers	 Honoring commitments Providing premium and quality products Open communication and service channels 	· Business meeting · Service hotline · Business visits	 Honoring contracts Providing quality products and services Improving service system
Q	Employees	 Occupational health and safety protection Shared growth Salary and welfare security Humanistic care Employee localization 	· Employees' Representative Congress · Petition · Making company affairs public · SINOMACH News · Social responsibility report · Chairman mailbox	Providing labor protection equipment and facilities Smooth employee career development channels Education and training Competitive remuneration Employee care Enhanced overseas staff management
\$	Environment	Energy conservation and emissions reduction Economical use of resources Ecological protection Environmental charity	· Strengthening information dis- closure · Regular reporting information of energy saving and emissions reduction	 Green environmental management Green design Green product Green project Environmental actions
	Suppliers/ Contractors	Fair competitionIntegrity and honestyInformation confidentiality	 Supplier conference Bidding information disclosure Strategic cooperation Cooperation agreement 	 Equal consultations Honoring contracts Responsible sourcing
₽	Partners	Regular communication Long-term stable relationship	· Top management visiting · Strategic cooperation	· Integrity and law abiding · Mutual benefit and win-win cooperation
<u></u>	Peers	Fair competition Promoting industrial development	· Strengthening communication within the industry · Attending industrial forums and meetings · Paying exchange visit	· Safeguarding healthy industrial development · Participating in industrial standards development · Promoting industry exchanges and cooperation
	Media	· Information disclosure and transparency	Official website Social responsibility report Company announcement Interview Press conference	· Setting up news spokesman system · Disclosing information timely

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Operating revenue

288.17 billion

Year-on-year increase

34 %

Total profit

_{кмв} 11.2

billio

Year-on-year increase

29.3%

Value-creating SINOMACH Making Contributions to the Real Economy

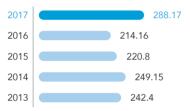
Taking innovation as the motivation, SINOMACH pursues quality growth, and continuously enhances the capabilities of sustainable development and value creation. We focus on the target to realize customer value, shareholder returns

and employee growth and pursue the greater corporate value and social value. By continuously contributing to the social prosperity and progress, we try to achieve sustainable prosperity.

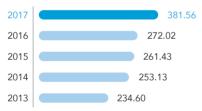
Achieving High-quality Growth

SINOMACH focuses on new goals and seizes the new normal of economic development to seek growth while ensuring stability and implementing all-round reform, aiming to promote the high-quality growth of the Group. In 2017, the Group completed the appraisal targets set by the SASAC and the Board of Directors and gained operating revenue of RMB 288.17 billion, up 34% year on year. The total profit was RMB 11.21 billion, an increase of 29.3% year on year, breaking the record of RMB ten billion for the first time.

Operating revenue (RMB Billion)



Total assets (RMB Billion)



Equities attributable to equity holders of the parent company (RMB Billion)



Fortune Global 500 (ranking)



Quality Development of CNEG

After the three-year reform, CNEG has begun making gains and gradually stepped into a new stage of sustainable and quality development by taking targeted measures. Since commencing on restructuring CNEG in 2013, SINOMACH has implemented a series of measures (downsizing, deleverage and enhancing development capability) to optimize the human resource structure and capital structure of CNEG and improve the market competitiveness of CNEG products. Moreover, SINOMACH has focused on enhancing strategic

collaboration, resource integration and operation optimization to boost the profitability of CNEG from the source, get CNEG out of the insolvency crisis and help CNEG turn losses into gains and achieve sustainability. In 2017, CNEG continuously strengthened the reform, further boosted the enterprise's operational efficiency, and cultivated new growth points in traditional areas and newly emerging areas, laying a solid foundation for realizing the strategic goal of sustainable and quality development.

CNEG's measures for quality development



Establishing the platform of SINOMACH Heavy Equipment

 Establishing the national high-end heavy equipment platform that bases on the platform of CNEG heavy equipment and integrates science and technology, industry and trade– SINOMACH Heavy Equipment Platform



Continuously optimizing the system and mechanism

- Promoting the reform of remuneration system and building a remuneration system with more incentive.
- Building a foreign trade platform with brand new mechanism, concept and model – SINOMACH Heavy Equipment Chengdu Heavy Machinery Co., Ltd.



Enhancing the development of long-term products

- Promoting product transformation and upgrading in traditional areas to strengthen the advantageous and leading position
- Enhancing joint venture cooperation and product R&D in newly emerging areas to achieve a high starting point



Valuing the improvement of product competitiveness

- Valuing quality management to control the waste loss ratio below 0.16% throughout the year, the lowest level in the industry
- Implementing strict control over cost management to reduce the cost by RMB 135 million after eliminating the factor of the higher price of bulk materials
- Enhancing the management on delivery period and completing 95.63% contract, 2.18 percent higher than last year

"Reform manifests in every detail of our work. Turning losses into gains and realizing rejuvenation through reform are the responsibility of every employee from CNEG. After implementing measures such as business optimization and reposition of redundant personnel, we had fewer employees. It was tough times for us all. However, together with my colleagues, we have got ourselves through and did not delay the delivery of any coordinated business with SINOMACH and gained the recognition of our clients."

— Zhang Xiaolei, a worker in the plate-work and welding section of Jinjie Factory of CNEG Heavy Machinery Co., Ltd.

"The core concepts of the supply-side structural reform, reducing inventory, improving quality and enhancing efficiency, provide us with a development idea for CNEG Zhenjiang Company. CNEG Zhenjiang Company has undertaken some dramatic changes and gradually developed the self-sufficient capability.

——Zhu Shasha, an employee from the Department of Technology of CNEG Zhenjiang Company

Preliminary Effects of Restructuring with CHTC

In 2017, SINOMACH and CHTC began restructuring and CHTC was merged into SINOMACH. The business scope of CHTC covers three sectors, i.e. textile machinery, commercial vehicles, textile and trade. CHTC has the largest global production capacity of textile equipment. ranking No. 1 in market competitiveness around the world. The restructuring of SINOMACH and CHTC has enabled both parties to make full use of their synergy effect in areas such as textile equipment manufacturing, automobile, trade services and finance. The restructuring is an important opportunity for both parties to build a comprehensive machinery and equipment group with improved industrial chain and broader business scope by sharing resources and mutual benefits with each other and improving core competency and international competitiveness.

"We must be confident in building stronger and larger state-owned enterprises (SOEs) and keep enhancing our vitality, influence and risk resistance capability. According to the requirements for the innovative, coordinated, green, open and shared development, we shall promote structural adjustment and innovative development and optimize business layout so as to make SOEs play a leading role in the supply-side structural reform."

——An excerpt from President Xi Jinping's speech at National
Symposium on SOEs Reform



▲ Holding the meeting of restructuring of SINOMACH and CHTC

Extended reading





Founded in 1998, China Hi Tech Group Corporation (CHTC)is the only central SOE in China that specializes in textile equipment. The business scope of CHTC covers textile machinery, textile trade, new fiber materials, commercial vehicles, engineering machinery, financial investment and assets management, as well as cultural industry and real estate, etc. CHTC has 24 secondary wholly-owned and holding secondary subsidiaries, three holding listed companies at home and abroad, and over 46,000 employees in total. CHTC has member enterprises in more than 20 provinces, municipalities and autonomous regions in China and about 20 countries and regions overseas. It has become a conglomerate that owns the assets scale of RMB 90 billion and the profits scale of RMB 3 billion.

Consolidating Basic Management

SINOMACH continuously improves the management system, optimizes the management process and adjusts management elements to keep exploring the management and control system with its own characteristics and has elevated its corporate management, providing fundamental guarantee for quality development.



▲ SINOMACH signs the strategic cooperation agreement with Beijing Normal University

Promoting Strategic Management

SINOMACH attaches great importance to playing the role as a strategic engine in the industry. According to domestic and overseas macro-economy, industrial development trends and corporate operation situation, we steadily promote strategic management and make a scientific rolling plan. We also continuously enhance the whole-process management and control of strategic planning and value the implementation, review and evaluation management.

Key actions of SINOMACH strategic management

Enhancing the formulation, implementation, management & control, and evaluation management of strategic planning



- Formulating SINOMACH Development Plan 2017-2019 and initiating the compilation of SINOMACH internationalized business operation strategies
- Subdividing and implementing key work of top management of SINOMACH to effectively promote the implementation of strategies
- Completing the preliminary review and approval of plans of 13 enterprises for the 13th Five-Year Plan Period
- Compiling SINOMACH Strategic Evaluation Report 2016 and providing summaries and variance analyses based on the results of implementing strategic goals



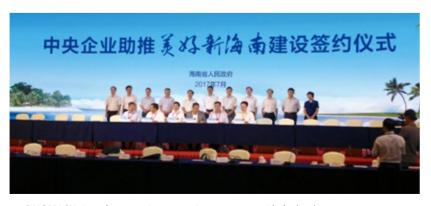
Improving the strategic management system

 Amending basic systems of strategic management such as the Measures for the Management of SINOMACH Development Strategies and Planning



Expanding strategic cooperation

 Expanding cooperation with local governments, financial organizations, central SOEs, universities and colleges, and other institutes; signing 11 strategic cooperation agreements



 SINOMACH signs the strategic cooperation agreement with the local government of Hainan Province

Enhancing Financial Management

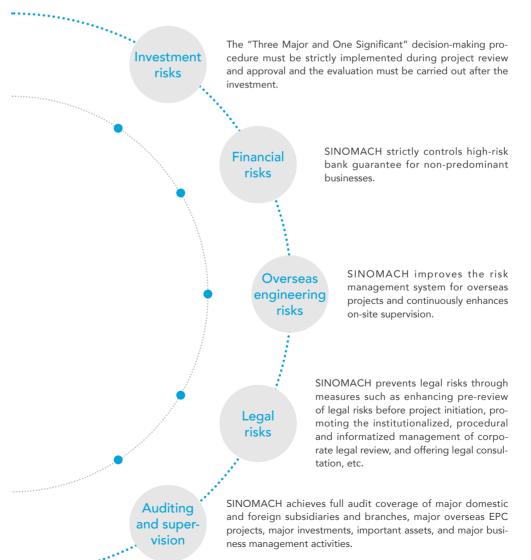
SINOMACH persists in financial value management and keeps on promoting innovation in financial management. We continuously improve our capital management and control capability and the capital concentration ratio reached 89.3%; The overall financing capability has been enhanced and we deepened cooperation with banks, with credit scale over RMB 340.6 billion in 2017; We also continuously deepen the comprehensive budget management, continuously optimize the management process and system, and effectively integrate budget goals and business performance goals, gradually guiding optimization in business structure; We also improve the property right management system and have realized informatization and internetization in property right registration. The completeness and accurateness of property right registration data reached 100% and 99.3% respectively.

Capital concentration ratio

89.3%

Credit scale over

RMB **340.6** bil



Implementing Strict Risk Management

SINOMACH enhances the building of the overall risk management system to effectively prevent investment risks, financial risks, overseas engineering risks and legal risks. With higher capabilities of risk prevention and control, SINOMACH guarantees its healthy development.

Improving Informatization Management

SINOMACH continuously enhances the informatized infrastructure construction, and has established SINOMACH Cloud Computing Platform to improve integrated service capability in informatized infrastructure such as network, data center and hardware resources. We promote the building of global coordinated work platform and global network projects, and regulate the standards of design, construction and operation & maintenance management of general information system to improve the establishment, management and safety protection of information system. We also have organized trainings on Cyber Security Law and network security contingency drills to enhance network security and information security quarantee.

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Coordination for Shared Values

SINOMACH orderly promotes the adjusting process of main business structure. While maintaining the rapid development of business sectors of project contracting, and trade and services, SINOMACH expands its business of equipment R&D and manufacturing, focuses on main businesses and develops finance and investment business, realizing the transformation of business layout from three main businesses to four main businesses including manufacturing, engineering, trade and capital. It also realizes business coordination, diversified operation and multiple business types. In 2017, the newly contracted value of SINOMACH reached USD 45.71 billion, up 4.1% year on year, maintaining a steady development momentum.

Newly signed contract value

Year-on-year increase

SINOMACH helps build a business card for China in equipment manufacturing



▲ CAP1400 nuclear power reactor coolant pipes



▲ General Manager Xu Jian attends the awarding ceremony of China's Top 100 Enterprises in Machinery Industry and is receives the medal.

Equipment Manufacturing Facilitates Industrial Upgrading

SINOMACH continuously promotes the transformation and upgrading of equipment manufacturing segment. By centering on agricultural machinery, heavy equipment, forestry machinery, engineering machinery and equipment for geotechnical engineering, we keep on enhancing design and R&D, strengthen "intelligent manufacturing in SINOMACH" and strive to design high value-added products with core competitiveness, which has filled technology, equipment and product gaps in China and contributed to realizing the strategy of being a manufacturing power and facilitated the implementation of Made in China 2025. In 2017, SINOMACH still topped the list of China's Top 100 Enterprises in Machinery Industry.

Since its foundation, SINOMACH has been committed to equipment manufacturing industry and made contributions to building a business card for China in the fields of high-speed train, nuclear power and aerospace. In aerospace engineering, SINOMACH supplied special bearings and precise metal bellows, etc. to guarantee the success of projects and was awarded the medal of Brilliant Contribution Award in Chinese Manned Spaceflight Engineering Project. In high-speed train products, SINOMACH actively developed the segment of core

> components of rail traffic and has become the key component supplier for Fuxing highspeed trains. In nuclear power products, SINOMACH completed the national special task of CAP1400 nuclear power reactor coolant pipes, which showed its comprehensive mastery of related technology, and finished the development of forge pieces of the main pump of Hualong one.

Project Contracting Drives Product Export

SINOMACH actively promotes EPC+, PPP and the establishment of overseas industrial parks, aligns overseas project contracting and franchised operation with the establishment of industrial parks, and propels the transformation and upgrading of overseas project contracting business. In 2017, SINOMACH ranked 31st among ENR Top 250 International Contractors and 7th among 65 Chinese contractors on the list: SINOMACH ranked 64th among Top 225 International Engineering Design Companies and 5th among the 22 Chinese contractors on the list.



▲ SINOMACH signs the cooperation agreement with China XD Group on power transmission and transformation in Laos to help Chinese equipment go global

ENR Top 250 International Contractors

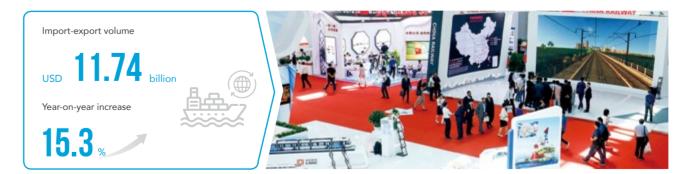
65 Chinese contractors on the list

ENR Top 225 International Engineering Design Companies

22 Chinese contractors on the list

Optimizing Resource Allocation of Trade and Services

Trade and services is a traditional business segment of SINOMACH and plays an important role in export of Chinese mechanical and electrical products and introduction of foreign technology and products. It mainly covers four service businesses including automobile trade, trade of mechanical and electrical products, other general trade and exhibitions. SINOMACH actively optimizes trading products(mostly mechanical and electrical equipment), trading ways and trading market layout, and gradually improves its global trade influence. In 2017, SINOMACH ranked 20th among Top 500 Chinese Enterprises in Foreign Trade, with USD 11.74 billion of import-export volume, 15.3% increase year on year.



▲ Holding the China-Arab States High-Speed Rail Conference 2017

Capital Operation Improves Structural Layout

Adhering to the four-wheel drive development concept, SINOMACH, while maintaining the three segments of equipment R&D and manufacturing, project contracting and trade & services, accelerates capital operation to promote the balanced development and mutual support between all business segments including manufacturing, engineering, trade and financial capital. SINOMACH continuously expands external restructuring and proactively explores deeper cooperation with leading enterprises at home and abroad. By promoting internal integration, we have promoted optimization of core business segments of SINOMACH and business layouts of our subsidiaries. We also actively propel capital operation and continuously promote the flow of premium resources to listed companies so as to improve resource allocation efficiencv. The industrial investment also has been orderly implemented to support the transformation and upgrading of project investment of the Company.

Strategic Emerging Industries Promotes Business Growth

SINOMACH implements the national development plan of strategic emerging industries during the 13th Five-Year Plan period, actively cultivates strategic emerging industries and supports key areas including new energy automobile, offshore windpower, rail transit, high-end numerical control machinery as well as robots, aerospace equipment, marine engineering equipment, etc. while enhancing advantages in traditional industries and products, aiming to promote SINOMACH to become a high-end equipment manufacturing enterprise in the world. In 2017, SINOMACH AUTO initiated the project of new energy automobile project; CACS became the whole-process solution supplier for the offshore and land windpower project; SUMEC became the supplier of key components for Fuxing High-speed Trains.

External restructuring

- Restructuring with CHTC to expand business scope and markets of SINOMACH
- Exploring the possibility of restructuring with central SOEs and local leading enterprises that matches our business segments to improve the industrial chain
- Enhancing cooperation with leading international enterprises. For example, accelerating the exploration of cooperation path and business development model with GE

Capital operation

 Actively promoting enterprises with good prospects and higher speed of growth to enter the capital market. For example, SINOMACHINT completed the shareholding reform and initiated the preparation for IPO on mainboard; Sinotest Equipment completed the shareholding reform and the shares transfer system officially transacted the listing application

Internal integration

- Establishing the platform of SINOMACH Heavy Equipment and the platform of SINOMACH Precision Industry to realize assets securitization of some subsidiaries
- CMEC acquired and restructured CNEEC, preventing peer competition in the same industry
- Promoting subsidiaries such as SINOMACH Heavy Industry, HGM-RI and SINOMACH INTELTECH to integrate internal resources and realize layout structure optimization

Industrial investment

 Supporting SINOMACH AUTO, SINOMACH INTELTECH, CMEC and CAMCE to make investment in strategic emerging areas such as new energy automobile and intelligent manufacturing

Accelerating the development of new energy automobiles

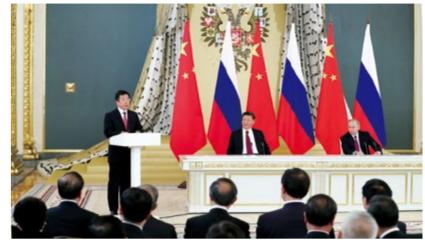
In 2017, SINOMACH entered the market of new energy passenger cars manufacturing. SINOMACH AUTO signed the cooperation agreement and the investment agreement with the People's Government of Ganzhou City, Jiangxi Province and the Administration Committee of Ganzhou Economic Development Zone on SINOMACH new energy automobile project. With the investments of SINOMACH subsidiaries, technicians and private enterprises, the total investment amounted to RMB 2.5 billion. After reaching the designed capacity, the annual production of new energy automobile will be estimated to reach 100,000 vehicles, realizing sales income of over RMB eight billion. By the end of 2017, SINOMACH Ganzhou Base completed the construction of factories in the four workshops, orderly conducted R&D of automobile types, and preliminarily determined marketing plans and brand programs.



▲ The ground breaking ceremony of the new energy automobile project

Implementing Internationalized Operation

SINOMACH takes its initiative to integrate its development into the national plan for economy and diplomacy and serves the Belt and Road Initiative. Complying with the principle of achieving shared growth through discussion and collaboration. we have enhanced open cooperation on innovation capability, and implemented the strategy of "reshaping a new SINOMACH overseas". We accelerate the establishment of a unified informatized platform for international business to enhance the management of overseas investment, overseas cooperation and overseas organizations; While expanding traditional markets in Asia, Africa and Latin America, we strive to develop markets in developed countries in Europe and America, etc. In 2017, our overseas subsidiaries made profits of over RMB one billion for the first time, with foreign business revenue accounting for more than 60%. The internationalized operation has been further improved.



▲ Chairman Ren Hongbin attends the meeting of The Sino-Russian Committee of Friendship, Peace and Development.

Building the Belt and Road

SINOMACH deeply participates in building the "Belt and Road", which also brings great opportunities for the overseas business in terms of "route and navigation exploration", "infrastructure industry chain" and "energy construction". Since the introduction of the Belt and Road Initiative by General Secretary Xi in 2013, SINOMACH has actively expanded relevant national markets along the route. As of now, in the 48 of the countries along the Belt and Road, 733 projects have been completed or are implementing. The total contract amount is over USD 73.6 billion. Several projects have become landmark projects in the country where the project is located.

We focus on international cooperation on production capacity and equipment manufacturing, and promote the "going global" of Chinese products, technologies, standards and services. Choosing targeted key locations along the Belt and Road, we try to develop business, expand



Zhang Dejiang, Member of Political Bureau of the 18th CPC Central Committee and Chairman of the NPC Standing Committee, visits SINOMACH China-Belarus Industrial Park.

the neighboring areas, and gradually form the business layout covering Asia, Europe and Africa. Also, the enhanced localized management has ensured the increasing number of overseas institutions and that of local employees. By promoting the construction of key overseas industrial parks, China-Belarus Industrial Park had welcomed 23 enterprises to settle and signed agreements of intent with 30 enterprises by the end of 2017, with the total contracted investment of USD 697 million.

Conducting International Cooperation and Exchange

SINOMACH continuously enhances the international influence of SINOMACH brand by actively attending various international cooperation and exchange activities such as World Economy Forum, Boao Forum for Asia (BFA), B20 and the Belt and Road Forum for International Cooperation.



NNOVATION

6.202

Number of invention patent

621

Standards that SINOMACH presided over or participated in the formulation and revision

734

item

The overall technological transformation rate of research achievements surpassed

95%

2 Innovative SINOMACH Driving Reform and Transformation

SINOMACH develops the culture and spirit of innovation and creates a cultural atmosphere that encourages innovation, competition and is tolerant of failure. SINOMACH improves the technological innovation system to enhance technological innovation capabilities and strengthens management innovation to pursue profitability and efficiency in management. We continuously innovate

in organizational, system and business modes to eliminate system and institutional barriers that hinder the development of SINOMACH. We develop innovation in talent incentive and cultivation to motivate employees' enthusiasm for and potential of innovation, and cultivate employees' innovation capabilities in thinking, learning and working.

Strengthening Technological Innovation

SINOMACH strives to promote the strategic decision-making capability of technological innovation at Group level, enhances the top-level design of technological innovation, and improves the technological innovation system. While improving its original innovation capability and integrated innovation capability, SINOMACH endeavors to promote the transformation of technological results and produces global leading technology and products with independent intellectual property rights to lead the technological development and progress in the industry.

Improving the Technological Innovation System

SINOMACH has established an open technological innovation platform to enhance communication and cooperation with other enterprises, universities and colleges, and scientific research institutes. We have built and improved the multi-level technological innovation system that covers strategic decision making, strategy execution and product and technology development. We have also set up SINOMACH Science and Technology Committee and the Innovation Alliance for Smart Factories and Technological Coordination in New Materials Industry to continuously improve the technological innovation system which integrates enterprise, university, research, trading and financing.

SINOMACH Technological Innovation System







Strategic Decision-Making Level

The highest decision-making body of SINOMACH consists of the General Manager's Office and the Science and Technology Committee

Strategic Execution Level

Central research institute and overseas R&D institute provide a high-level strategic execution platform for fully utilizing scientific and technological resources

Products and Technology Development Level

R&D platforms and institutes (including national-level R&D institutes) owned by SINOMACH second-tier subsidiaries

Platform of Sci-tech Innovation

We push forward the establishment of national platforms of sci-tech innovation. In 2017, five more platforms were approved, including SINOMACH INTELTECH National and Local Joint Project Research Center for Industrial Friction Lubricant Technology as well as National Robot Innovation Center and ZYS International S&T Cooperation Demonstration Base for High-performance Bearing Digital Design, HGMRI Service and Manufacturing Demonstration Platform of High-end Fluid Machinery and Pressure Vessels, SUMEC National Industrial Design Center.



- National engineering technology research centers
- A National engineering research centers
- State-level key labs
- State-level engineering labs
- National industrial technology innovation alliances
- 5 International cooperation bases

- 11 National innovation pilot enterprises
- 16 National enterprise technology centers
- Postdoctoral scientific research stations
- National productivity promotion centers
- **30** Provincial/ministerial (industrial) key labs
- Provincial/ministerial engineering (technology) research centers

SINO-HEAVYMACH invents the technology and innovation platform of high quality ultra-thick special steel plate continuous casting In 2017, the technology and innovation platform of high quality ultra-thick special steel plate continuous casting undertaken by SINO-HEAVYMACH, the first platform of such kind in China, was recognized by SINOMACH in the technological achievement appraisal. The overall technological level reached the international advanced level. In particular, the continuous casting process physical simulation platform in the full-scale tundish and Crystallizer coupling model for the high quality ultra-thick special steel plate continuous casting technology and the cloud service system based on industrial big data reach the leading level.

Launching the Discovery Campaign

SINOMACH implements the strategic deployment of the Discovery Campaign, organizes leaders of the secondary subsidiaries of SINOMACH to attend brainstorm meetings, and strives to create a corporate atmosphere that promotes "Discovery". Taking the Discovery Campaign as an opportunity, we have organized technology transfer among enterprises to promote business in emerging industries, and conducted the 2045 accelerator project docking activity in the Discovery Campaign to exchange views on projects such as two-wheel electronic vehicle, metal laser 3D printing, mechanical exoskeleton, digital hydraulic transmission, carborundum units and microsatellite. Our subsidiaries actively implement the Discovery Campaigns. In particular, SIPPR has established the new model of smart factories to promote the full-lifecycle digital application of engineering construction projects; SINOMACH INTELTECH has applied the independently developed smart factory manufacturing and operation system into the digital factory project of intelligent distribution network switchgear equipment.

The Discovery Campaign leads the trend of innovation

In order to adapt to the development requirements in the new era, SINOMACH launched the Discovery Campaign in full swing in 2017 to call upon all subsidiaries and institutes to discover, innovate and realize self-transcendence; SINOMACH intended to establish the industrial incubation base and the fund for the Discovery Campaign to cultivate new industries and new business types in due course.

Four Goals of the Discovery Campaign

New technology and new techniques

Integrating technology and product innovation with corporate development, taking the initiative to discover and applying new technology and new inventions, especially the disruptive technology in relevant areas

New markets and new business opportunities

Cultivating a sharp insight into markets and the overall planning and business layout capability, continuously discovering, innovating, and grasping business opportunities to promote innovative development of the enterprise

New models and new ideas

Valuing corporate development driven by innovation in business models, thinking about and discovering new business models in terms of all links such as technology, marketing and users from the transdisciplinary perspective to build a new path for development

Innovation talents and teams

Innovation talents and teams, who are equipped with the spirit of innovation and can bring about new technology, new creation, new concepts and new models, are our targets

The Discovery Campaign – Black Technology

- The Continuous Press produced by CFMC, the shining star in wood-based panel machine industry, entered the international market in 2017.
- Based on the 80,000-ton die-forging press, CNEG realized the mass production and engineering application of large-scale die-forging presses for multiple models of military and civil aircrafts, removed the barriers that hinder the development of advanced aircrafts and engines in China, and realized the application of homegrown die-forging presses on C919.
- Guangyan Lubricant developed by SINOMACH INTELTECH solves the problem of lubricant for special equipment and realizes the localized production of imported oil products.
- The project of key technology equipment for wine brewery manufacturing undertaken by CAAMS was recognized by the expert panel, symbolizing that China had grasped the key technology of grape picking machines.

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Improving Capacity for Independent Technological Innovation

SINOMACH enhances the technological innovation capacity building, engages in international technological cooperation to integrate into global innovation network and undertakes state-level strategic tasks of technological research and key generic technology while conducting more marketized technological innovation activities, striving to promote the continuous improvement of technological innovation.

Increasing Technological Investment

Sticking to the policy of "R&D investment brings benefits", SINOMACH increases investment in technological innovation. Led by the technical development fund, we try to establish the industrial fund for equipment manufacturing and R&D transformation and upgrading, and set up the multi-channel investment mechanism. In 2017, SINOMACH invested RMB 6.202 billion in technological innovation, 29.5% increase year on year. Moreover, SINOMACH obtained RMB 460 million as the national technological fund and saved RMB 117 million through tax exemption in key technological equipment import. The first equipment insurance project was awarded subsidies of about RMB ten million.



- Project of Research and Application of Anti-seismic Key Technology for Industrial Buildings undertaken by SINOMACH and CUC
- Key Technology and Engineering Application of Light Weight Design and Manufacturing of Heavy Pressure Vessels undertaken by HGMRI
- Project of Design, Manufacturing and Application of Highly Efficient Cutting Tools participated by Chengdu Tools Research Institute
- Project of Manufacturing Method and Equipment of Mouldless Shaping of Complicated Casting participated by YTO
- INTELTECH, including the project of Mechanical Equipment Smart Lubricant Diagnosis and Maintenance System Based on Online Monitoring undertaken by SINOMACH INTELTECH, wined the first, second and third prizes in the Innovation and Entrepreneurship Competition for Central SOEs.

Cultivating Talents in Technological Innovation

SINOMACH promotes the building of technological talent teams at all levels. By establishing the chief expert system and guiding our subsidiaries to open up career development channels for talents, we aim to create a good development environment for their development. We have gradually formed a multi-level technological talent team consisting of Group-level chief experts, chief experts in different business segments and experts in all fields, so as to build a high-level talent team to provide intelligence support for the Group's transformation & upgrade and high quality development.

Academicians at SINOMACH



Yan Chuliang

- Selected as the academician of the Chinese Academy of Sciences in 2015
- Vice Chief Engineer of SINOMACH-STRI and President of Beijing Aircraft Strength Institute

Expert in aircraft structure reliability. He integrated safety lifespan and damage tolerance design and built the aircraft economy and lifespan reliability appraisal model, which has been applied in thousands of aircrafts of over 20 types to measure or extend lifespan. He provides technical support to achieve the goals of longer lifespan, higher reliability and lower cost in aircrafts.

S&T Talents at SINOMACH

Academician of Chinese
Academy of Sciences

1

Academicians of Chinese
Academy of Engineering

5

Experts from the Organization Department of the CPC Central Committee

Experts Selected in the "Thousand Talents Program"

Experts Selected in the "Ten Thousand Talents Program"

National Engineering Supervision Experts

National Engineering

Monitoring & Design Experts

Winners of China Science and Technology Award for Youth

Middle-aged and young technical experts who made outstanding contributions

State-level candidates of Talents Project

26

8

Chen Xuedong



 Chief Engineer of SINOMACH, President and Party Secretary of China General Machinery Research Institute Co.,Ltd.(CGMRI)

Technological expert in special equipment design & manufacturing and operation & maintenance engineering. He has made outstanding contributions to enhancing the reliability and safety of pressure vessel design, manufacturing and operation, significantly reducing the equipment accident occurrence and risk grade, and promoting the quality improvement and transformation & upgrading of petrochemical industry and equipment manufacturing industry.

Guan Jie

- Selected as the academician of the Chinese Academy of Engineering in 1997
- Executive Vice Chief Engineer of SINO-HEAVYMACH

As Head of the continuous casting industry, he developed large plate continuous casting machines, such as 2,300MM, 1,350MM and 1,280MM, for large enterprises including Chongqing Iron & Steel (Group) Co., Ltd., Pan Steel Group Co., Ltd. and Taiyuan Iron & Steel (Group) Co., Ltd., making great contributions to the cause of continuous casting in metallurgy industry in China.



Cheng Taining

- Selected as the academician of the Chinese Academy of Engineering in 2005
- Chief Architect of China United Engineering Corporation Limited

Chairman of CCTN Architecture Design Co. Ltd. in Hang-

Expert in architecture. He participated in the scheme design for grand projects such as Great Hall of the People. He was also in charge of over 50 domestic and foreign architecture projects including Hangzhou Railway New Station, Nanjing Museum and National Theatre of Ghana, etc. Many of his original and innovative works win him recognition and positive comments from peer architects at home and abroad, making great contributions to the development of modern architecture in China.

CGMRI awarded again as the "115" industrial innovation team of Anhui Province

"The technological innovation team for light weight industrialization of heavy pressure vessels" of China General Machinery Research Institute Co.,Ltd.(CGMRI) was selected as the 9th "115" industrial innovation team of Anhui Province. The innovation team serves in areas of petroleum and petrochemical industry, coal chemical industry, hydrogen utilization and gas gathering & transmission and conducts research on key technology of reliable light-weight design and manufacturing. These efforts could realize the trend of light weight of heavy vessels such as large and high temperature reinforced reactor and vehicle-mounted high pressure hydrogen storage, further promoting technical progress in green design and manufacturing of pressure vessels in China.

Carrying out Research on Key Projects

SINOMACH pays close attention to the implementation of National Technological Innovation Base Optimization and Integration Program. Centering on the plan of SINOMACH on key technology integration and key emerging industries during the 13th Five-Year Plan period, we make much efforts in coordination in key projects and overall solutions research in advantageous areas to promote the implementation of key projects and drive the industry technological upgrading of the Group. In 2017, SINOMACH newly developed over 90 national projects, identified 7 key S&T projects, developed 10 R&D projects, and organized 7 institutes such as CAAMS and YTO to jointly carry out planning and feasibility validation for Beidou Application Demonstration Project of Operation Machine Precision Control. The project was co-approved by the Equipment Development Department of the Military Commission and the SASAC, becoming the first Beidou application demonstration project undertaken by a central SOE.

The state-level key research projects undertaken by CAAMS kicks off

In March 2017, the kick-off meeting of the research project of Self-propelled Paddy Field Boom Sprayers Technology and Smart Equipment, the state-level key research project undertaken by CAAMS, was held. The project aims to solve the problem of lack of automatic, efficient and smart plant protection machines for prevention and control of pests in paddy field. Through exploring key technologies such as ultra-light weight chassis design, chassis posture perception and skid control, the project tries to develop the self-propelled light-weight chassis, the self-propelled chassis control system, the electrostatic spraying control system and the smart variable spraying control system, and integrate these technologies to develop self-propelled smart boom sprayers that are used for paddy field plants.

Strengthening IPR Protection

We fully implement the strategy of intellectual property right (IPR) and continue to strengthen IPR protection. In 2017, SINOMACH applied for 1,990 patents, including 790 invention patents, and authorized 1,542 patents, including 621 invention patents.

Number of applied patent

Number of invention patent

1,990

790

Number of authorized patent

Number of invention patent

62 62



Leading Industrial Technological Progress

We actively undertake state-level tasks of strategic technological research and lead the research of key generic technology to play the leading role as a central SOE in technical innovation, and be a pioneer of the progress in technological development in China's machinery industry.

Strengthening the R&D of Core Technologies

SINOMACH proactively strengthens the R&D of key technologies to guide the technological development of machinery industry. In 2017, SINOMACH won 360 outstanding industrial achievement awards at provincial/ministerial level or national level, among which 135 were scientific and technological awards, and 200 were survey, design, or consulting awards.

CNEG wins the award of scientific and technological progress by Chinese Society for Measurement (CSM)

On May 20, 2017, the theme event of World Metrology Day 2017 and the awarding ceremony for the highest scientific and technological progress in Chinese measurement field was held in Beijing. The project Method and Application of In-situ Measurement and Manufacturing Control of Heavy Vacuum Target Chamber completed by CNEG won the second prize of scientific and technological progress. CNEG was the only prize winner in the group of enterprises in 2017 and it was the second honor after winning the prize of scientific and technological progress in 2013, symbolizing that the geometric quantity detection technology and manufacturing technology of CNEG reaches the national leading level.

The first unmanned smart automatic straightener production line in China

In 2017, Changchun Research Institute for Mechanical Science of CAAMS developed the first smart automatic straightener production line in China, which consists of 4 automatic transmission lines, 1 smart robot and 2 automatic strengheners. The production line realizes the integration of smart, mass, flexible and unmanned production for the first time, which considerably improves production efficiency and manufacturing quality, and also provides support for flexible and individualized production. It contributes to unmanned automatic production and unlighted production and helps perform thermal treatment. Moreover, it helps relevant enterprises build smart factories and save human labor costs. CAAMS created the history of smart production of automatic straighteners in China and built up the image of "Made by SINOMACH" based on "the internet + manufacturing".



▲ The first unmanned smart automatic straightener production line in China

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Accelerating the Pace of Civil-military **Production Integration**

In 2017, military technological research production maintained a rising momentum and realized the revenue of RMB 1.51 billion, 12% increase year on year. Ten technological research projects of military supplies such as winning the bidding of big aircrafts and alternatives for key imported materials. The annual expenditure of the winning technological research projects in 2017 reached RMB 100 million for the

Revenue

CIMRI was approved to research on localization of key materials with the fund of RMB 59.66 million.

The CNEG research team for large aviation die forgings was selected as one of the Top Ten Innovation Persons/Teams in National Defense S&T Industry in 2017

Huang Naining from SAIS and Li Wenchao from ZYS won the honors of Great Contributors to the First Flight of Long March 5 Carrier Rocket by five ministries including the Ministry of Human Resources and Social Security.



▲ The 80,000-ton die-forging press

Participating in the Formulation of Industry Standards

In 2017, we presided over or participated in the formulation and revision of 734 standards, including 274 national standards. Centering on smart manufacturing, we organized 11 subsidiaries to conduct research on SINOMACH smart factory standard system to promote the formulation of overall solutions of smart factories, wining high praise in the industry.

In August 2017, the two international standards ISO 10987-2 and ISO 10987-3 drafted by SINOMACH Tianjin Research Institute of Construction Machinery, which are Earth-moving machinery — Sustainability — Part 2:Remanufacturing and Earth-moving machinery — Sustainability — Part3:Used machines were officially issued. The two standards fill in China's gaps in formulating international standards for earth-moving machinery. They also facilitate China to deepen the participation in work related to international standards for earth-moving machinery, and promote the development of China and other countries in terms of the remanufacturing and reused machines of earth-moving machinery.

Standards that SINOMACH presided over or participated

734 items

National standards

SINOMACH leads the formulation of two international standards for earth-moving

Accelerating Industrialization of Technological **Innovation Achievements**

We focus on the industrialization of research achievements and have set up a platform to accelerate transformation and upgrading. In 2017, the overall transformation rate surpassed 95%.

The overall technological transformation rate of research achievements surpassed

95 %

The achievement of the national technological project of 3000KN/7500KNm Large Forging Manipulator undertaken by SINO-HEAVYMACH was applied in the largest hydraulic forging manipulator in the world.

The 10,000-meter deep ocean bottom seismometer co-developed by China Geological Equipment Group Co., Ltd made China become the first country that obtained the artificial 10,000-meter deep ocean seismic profile.

Key components of CRH high-speed trains co-developed by CMEC realize localized production

In order to improve the abrasion resistance and reliability of carbon brush holders and friction disks of CRH train grounding devices under circumstances of high current and high rotation, CMEC cooperated with Southwest Jiaotong University in technological innovation and successfully developed the grounding devices that has the independent intellectual property right, i.e. carbon brush holders and friction disks. The designed product lifespan is over 2.4 million km. After the 300,000km test, the abrasion approached zero. The product lifespan is six times that of products of this kind in foreign countries. CMEC is ready to supply products in bulk for high-speed trains of CRRC. The grounding devices of CRH3 series broke the monopoly of foreign suppliers, and successfully replaced imported products, fully realizing the localized production.



 Wang Yong, State Councilor, visits the Central SOE Innovation Achievement Display Platform and gives high praise to SINOMACH in terms of its contributions to equipment manufacturing.

in the formulation and revision

machinery for the first time

Promoting Management Innovation

We actively carry out activities to promote management innovation and adapt to the trends and changes of market competition. We continuously improve the management of the Group to enhance comprehensive risk management and keep on innovating in business modes to deeply promote the innovative corporate management.

Subsidies distributed to central SOEs for disposing zombie companies

Employees reallocated from zombie

Improving Management and Control of the Group

SINOMACH improves quality and efficiency to enhance the management and control of the Group. Through simplifying the management hierarchy, disposing of "zombie companies" and actively carrying out special governance methods towards difficult enterprises, we continuously improve management capability and operation efficiency. In 2017, the number of legal persons at SINOMACH was reduced to 106, 10.8% down from the total number; 48 legal persons were canceled, 4.9 % decrease from the total number; subsidies of RMB 247 million were distributed to central SOEs under SINOMACH to dispose zombie companies, effectively easing the capital pressure incurred by staff reallocation in zombie companies; a total of 11,617 employees in zombie companies were reallocated, with the total reallocation percentage of 91%.

Innovating in Business Modes

SINOMACH explores the innovation paths and modes in the Internet Plus era, actively integrates advantages in financing, design, construction, operation and services, promotes the development of new business modes such as EPC+, industrial parks and PPP, striving to build the development mode of "investment and financing + construction + operation and maintenance integration".

Main measures of SINOMACH business mode innovation paths

Manufacturing service

Promoting the integration of traditional manufacturing and trade into information industry to improve the smart informatization of R&D, manufacturing, management and service, and provide underlying value-added service for customers

Channel construction

Conducting pilot trans-border e-commerce to facilitate SINOMACH products to "go global", and provide resources and platform support for corporate development

Main staged progress of SINOMACH subsidiaries in business model innovation in 2017

- SUMEC, YTO, ZYS and CNMTC enhanced the integration of traditional businesses and information technology and formed the information service system that combines online and offline advantages and takes big data assets as the core capability
- IPPR expanded the concept of medical and health care in the design field and built a new building mode that integrates medical care, rehabilitation and elderly care
- TRIED built its old site as a professional innovation park that integrates maker space, coordinative innovation, incubation and cultivation, and industrial applica-
- ◆ CEI "went global" through franchised operation and co-built the experiment lab with an Egyptian cooperation partner to provide customers with solutions for smart manufacturing system of customized robots
- GLESI adopted the mode of "financial leasing" to facilitate pellicle equipment business to sign new contracts

Deepening Corporate Reform

SINOMACH continuously improves the top-level design of corporate reform. We have formulated the Overall Plan for Deepening Reform at SINOMACH to specify the guiding thought of deepening reform and the seven key tasks, and issued the Implementation and Promotion Plan for Deepening Reform and the Interim Regulation on Supervision over Deepening Reform, forming a closed management loop from planning, implementation to supervision. Moreover, we take actions to promote targeted subsidiaries to conduct corporate reform and upgrading & optimization of traditional industries.



▲ CEI takes the initiative to complete work on employee stock ownership reform.

Promoting Corporate Restructuring

According to the SASAC, central SOEs shall have complete corporate reform by the end of 2017. In 2017, SINOMACH held the corporate reform meeting to specify the priorities of corporate reform and form a work mechanism with effective coordination among departments and topto-down linkage. The targeted 58 subsidiaries of SINOMACH completed corporate reform, established the modern enterprise system, and optimized legal person governance structure and market-oriented operation mechanism. By the end of 2017, SINOMACH broadly completed the corporate reform.

Main actions and measures of SINOMACH corporate reform in 2017

Deepening the mixed ownership system reform

- CEI completed the mixed ownership system reform and the employee stock ownership pilot (ESOP) project.
- Harbin Power System Engineering and Research Institute (CHPI) became one of ten pilot ESOP organizations in Heilongjiang Province.

Continuously optimizing the development and process system

- Establishing the process system optimization workshop
- Specifying the functions of all departments and business sectors
- Conducting surveys on management practices of leading enterprises at home and abroad

Optimizing and Upgrading **Traditional Industries**

We attach importance to optimizing traditional industries. Based on the characteristics of machinery industry and the Group's actual situation, we reform and improve traditional pillar industries to promote the expansion of industrial chains into key links and high value-added links and also promote the deep integration of the internet, big data, artificial intelligence and traditional industries to enhance digital, informatized and smart features of traditional industries.

The first independent developed cloud service platform for agricultural mechanization



▲ The 4th session of SINOMACH Lecture on experience of transformation of German industries

CAAMS actively promotes the smart and informatized development of agricultural equipment. CAAMS independently developed the first Cloud Service Platform for Agricultural Mechanization and Hope Field APP by leveraging the modern sensor, Internet of Things, and information technology. The platform can help farmers at home realize the precise remote-control operation of agricultural machines during busy seasons and timely monitor agricultural machines during seeding and harvest, making every link of agricultural production smarter and more precise.





Total energy consumption

 $1,055,664 \text{ } \text{\tiny TCE}$

Overall energy consumption per RMB 10,000 of output value

Overall energy consumption per RMB 10,000 of operating revenue

0.0032 TCE

Overall energy consumption per RMB 10,000 of added value

0.2351 TCE



Green SINOMACH Building a Beautiful China Building a Beautiful China

With strong awareness of green development and circular economy, SINOMACH chooses the green, energy-saving, efficient road for sustainable development to improve the Group's competitiveness in green development. We give full play to our advantages in the industry and draw on the current resources and conditions to provide society with green technology, green design, green techniques, green products and green service. We enhance investment in technological renovation and resources, and constantly reduce energy consumption per unit and pollutant discharge to build a resource-saving and environment friendly enterprise.

Building a Green Management Platform

SINOMACH integrates the concept of green development into the whole process of business management. We have formulated the 13th Five-Year Plan on Energy Saving and Environmental Protection to promote the manufacturing of green products and green service and continuously build the resource-saving, environment friendly and green management mode, establishing the responsible brand of Green SINOMACH. In 2017, we had good performance in environmental protection and constantly reduced energy consumption and emission index. SINOMACH's total energy consumption in 2017 reached 1,055,664 TCE. The overall energy consumption per RMB 10,000 of output value is 0.1908 TCE. The overall energy consumption per RMB 10,000 of operating revenue is 0.0032 TCE. The overall energy consumption per RMB 10,000 of added value is 0.2351 TCE. The emission volume of SO₂ is 4,235.4195 tons, and the emission volume of COD is 4.082.4793 tons.





Carrying out Whole-process Green Operation

Guided by the concept of green operation management, SINOMACH promotes green design, green production and green application. We strive to minimize environmental pollution and energy consumption and maximize energy conservation and environmental protection during the full product lifecycle.

Promoting Green Design

We integrate the concept of green development into the origin of product design and take local natural resources, social culture and customer demand into consideration so as to raise energy utilization efficiency and minimize energy consumption.



▲ SUMEC Machinery & Electric independently designs and develops multiple small gasoline engine generators

New IPPR Plaza certified Gold Level By LEED In 2017, New IPPR Plaza was certified Gold Level By LEED. The appraisal standard of LEED is considered to be the best and most influential evaluation standard among various environmental standards for buildings, green building evaluation standards and building sustainability standards. We applied environmental, energy and water saving technology, measures and product for New IPPR Plaza, selected the site and controlled the pollution source in terms of sustainability, and thus effectively reduced pollutant discharge and pollution treatment expenditure; through proper management and utilization of waste and renewable materials, the backfilling and recovery rate of building wastes reached 75%. The utilization value of recycling materials accounted for 10.09% of the total value while that of local materials accounted for 40% of the total value. We gained considerable economic benefits through energy conservation and emission reduction in engineering construction.



CUC promotes the development of "Sponge City"

"Sponge City" is an important "ecological business card" for the new district of Eastern Wenling City. In 2017, CUC won the bid of the engineering design project of sponge city in the middle area of the new district of Eastern Wenling City, Zhejiang Province. CUC introduced the concept of "Low Impact Development (LID)" in the project, drew on transverse section design optimization and low impact development facilities, such as biological retention belts, overflow gutter inlets and water gushing sidewalks, to store and purify rainwater on the road, finally formulating a rational design plan for "Sponge City".

Implementing Green Production

Innovating in Green Technologies

SINOMACH values the integration of the concept of innovation into the process of green production so as to cut down on pollution, reduce energy consumption and improve ecological environment, providing solid technical support for energy conservation and environmental protection.



Advocating the utilization of extra blank paper separating stainless steel plates as package of other products or process protection paper



▲ Multifunctional dust collection vehicle is delivered and verified.

YTO innovates in energy conservation

Without compromising the lightness of lighting, the Lost Foam Casting Factory Branch of a casting company of YTO disconnected the original starter and rectifier from the damaged old lighting and conducted energy-saving renovation based on the original lampshade. A retracted lamp holder can fix the new LED in position. Such measure saves energy and maintenance costs. There is no need to repair the components such as the rectifier and the starter. When the LED fails to work functionally, we can just replace it with another new one. If we calculate the electricity rate as RMB 0.65/kWh, 12 hours per day and 260 days a year, one energy-saving 50W LED lamp annually saves RMB 811 of electricity rates compared with the 450W original lamp.



Carrying out Energy Saving and Emission Reduction

We attach much importance to energy saving and emission reduction, proactively respond to the corresponding national deployment and implement responsible actions of low carbon and environmental protection; we organized and adjusted the organizational structure for energy saving and emission reduction work, and amended related regulations to promote green operation of SINOMACH. In 2017, we finished the performance appraisal work of 2017 targets in energy saving and emission reduction in 35 second-tier subsidiaries.

SINOMACH actions to respond to national calls of energy saving and environmental protection in 2017

Organizing subsidiaries to conduct inspections on coal and nitrogen reduction work

vant requirements

Submitting annual and seasonal work summaries and statistical reports on energy saving and emission reduction according to rele-

Recommending the three technologies such as "the Energy Saving Technology of Large Refrigerating Unit Performance Testing System" to be listed on National Catalog of Energy Saving and Emission Reduction Technology Promotion

Sorting out energy saving and

emission reduction projects of sub-

sidiaries and reporting the results

to the SASAC

SINOMACH work on energy saving and emission reduction in 2017



Amending the Regulations on Supervision and Management of Energy Saving and Emission Reduction, the Regulations on Statistics and Monitoring of Energy Saving and Emission Reduction and the Regulations on Performance Appraisal of Energy Saving and Emission Reduction



Investigating and evaluating key companies on energy-saving and emission reduction



Organizing subsidiaries to formulate the 13th Five-Year Plan on Energy Saving and Environmental Protection and designing the suggested annual goal for subsidiaries

Unmanned refuse compactor of SINOMACH HEAVY INDUSTRY rolls off the production line

In 2017, the GYL263RC unmanned refuse compactor of SINOMACH HEAVY INDUSTRY rolled off the production line. The equipment realizes unmanned control of the refuse compactor through the industry's first beyond-visual-range wireless remote control device and pioneers the application of intelligent unmanned control technology in the field of refuse compactor. The new compactor will effectively eliminate risks to compactor drivers during landfill, such as high temperature, lack of oxygen, toxic and harmful gases.

Promoting Green Application

During the links of engineering projects, such as plan formulation, process optimization and procurement of raw materials, we try to adopt new equipment and new technology and prevent any adverse impact on the surrounding environment.



▲ Shanghai Bailonggang Sewage Treatment Plant (the total predesigned scale of Phase I and Phase II projects is 2.8 million ton/day) --- the largest sewage treatment plant in Asia

CPF signs the agreement on the distributed energy project of Davu Industrial Park

On August 1, 2017, China Machinery Guoneng Zhihui Energy Co., Ltd. under CPF signed the distributed energy project of natural gas for Davu Industrial Park in Ganzhou City, Jiangxi Province. The project adopted the way of "gas turbine"+ "heat recover steam generator (HRSG)"+ "gasfired steam boiler" and realized hierarchical energy utilization through distributed cooling heating and power supply adjacent to the user end. After the project is completed and put into operation, the annual energy saved is expected to reach 6,506 TCE, with the energy saving rate of 31%, reduction of 7,999 tons of carbon dioxide and 23% of emission reduction.

The paper pulp factory project with 400,000-ton production capacity of CAMCE Belarus puts into operation

The paper pulp factory with 400,000-ton production capacity adopted the global advanced production technology and equipment. During the process of project design and construction, many green and innovative technologies were utilized. With high energy self-sufficiency, the project reduced production costs and safety risks, genuinely realizing the green and virtuous circle of "paper pulp for forestry, forestry for paper pulp". The project was a typical model in China-Belarus cooperation.

Bithia Thermal Power Project leads the environmental protection standard in Venezuela

The water treatment system of Bithia Thermal Power Project in Venezuela, which was undertaken by CAMCE, adopted the new RO+CEDI technology. It is considered to be the most advanced water treatment system in Venezuela according to the international advanced standard. The gas-steam recycling power generation is acknowledged to be an efficient power generation technology. The project applies two fuels, i.e. light diesel and natural gas. Compared with common coal-fired power stations, it has characteristics such as high efficiency of power generation, less pollution and emission, and low fuel consumption per power generation unit, thus saving energy. The practical testing proved that the project met the provisions of the contract and local standards of environmental protection, such as air pollution. emission and noise indexes, reaching the international advanced level. In 2017, the project was awarded as the Overseas Sustainable Infrastructure Project of China by China International Contractors Association.



Wen'an Zhongxin Biomass Heat Supply Project facilitates environmental protection

On January 12, 2017, the Column of Economy in the 10th page of People's Daily published the report themed Reducing Burden for the Sky, introducing Wen'an Zhongxin Biomass Heat Supply Project undertaken by Handan Branch of China Sinogy Electric Engineering (CSEEC) under CPF. In Wen'an County, the production way is rather extensive and relies much on random storage and incineration of agricultural and forestry waste, causing series environmental pollution. Taking national development strategy of low-carbon and environmental protection and the local reality into consideration, Wen'an Zhongxin Biomass Heat Supply EPC Project undertaken by CSEEC fully used local agricultural and forestry waste as fuels to generate power, such as straw, corncob and wood waste. This kind of biomass power generation not only reduces the emission of toxic and hazardous waste and protects local environment, but helps local residents gain other earnings, which is definitely a win-win results.

Advocating **Environmental Protection**

We always adhere to the principle that "energy saving and environmental protection done by the current generation, will benefit offspring". Within SINOMACH, we promote the concept of environmental protection. implement green office and encourage employees to participate in public welfare activities on environmental protection, striving to become an active promotor of a green China.

Promoting Green Office

In order to save resources and improve office efficiency, we integrate the concepts of green office, energy saving and environmental protection into daily office work. We enhance daily management from trifles to important matters, strengthen supervision over energy saving and emission reduction, and establish an improved and effective restraint mechanism. We continuously conduct publicity activities to realize energy saving and clean development.



▲ Carring out the composition collection activity themed "everyone for energy saving, greenness for everyone'

Participating in Public Welfare Activities on Environmental Protection

We joint hands with the public to practice low carbon and environmental actions, like carrying out campaign on environmental protection and energy saving, aiming to improve the environmental awareness of the general public and jointly build a green new era.



▲ Holding the signature activity of "Safety Month and Energy Saving & Emission Reduction Publicity Week'



On the Earth Day, April 22, 2017, employees planted trees in the desert area around the camp zone of Pakistan Tal Coal Mine and Greenpark.



▲ Low-Carbon Day - "Caron Lock" intelligent technology provides better services for human beings.



Number of enterprises that reached the work safety standards

132

Rectifying rate of hidden safety problems

99.56 %

04

Responsible SINOMACH

Sharing the Fruits of Development

As the largest company in China's machinery industry, SINOMACH must take the lead to assume the mission of revitalizing the Chinese machinery industry, as well as continuously enhance the CSR sense and build the awareness of "a global corporate citizen". By developing a sound corporate social responsibility

strategy and proper mechanisms for governance, integration, performance and communication, we can promote common development with stakeholders, constantly promote the unity of corporate economic, environmental and social benefits, and achieve harmonious development.

Developing together with Partners

Adhering to the corporate philosophy of "work together, win together", SINOMACH emphasizes beneficial interaction with partners. By lifting the quality of our services and products, we endeavor to create values for customers, build a sustainable value chain by working with partners, and realize win-win cooperation across the whole industry.

Creating Values for Customers

Starting from customer needs, we actively improve the quality of services and products and implement comprehensive quality management by strictly complying with the principle of "quality first and profit foremost". Through accurate analyses of customer needs, we aim to respond to their diversified needs and expectations, and continuously improve the reputation of SINOMACH products and services.



▲ Denis Sassou Nguesso, President of the Republic of the Congo, attends the acceptance ceremony of the supporting transmission and transformation project of the Transmission line and Transformation for Liouesso Hydropower Plant Project and speaks highly of the project.

Building a Responsible Value Chain

We promote quality management and control in collaboration with suppliers through improved supplier management, and gradually advance specialized division of labor of procurement personnel by learning from advanced experience of brother central SOEs. SINOMACH creates an open, fair and just bidding and tendering environment by applying information technology to tender inviting procedures.

CUC wins the honor of "Excellent Equipment Supplier"

CUC undertook the core production line of electrophoretic coating of Dongguan Light Tower 1.0 Project, the first digitalized factory under China International Marine Containers. The project team organized competent members of the coating institute under CUC and tackled multiple difficulties and technical problems of the electrophoretic coating production line, the first of its kind in special vehicle sector. Finally, the project team adopted the transmission model of "parallel depositing + programme-controlled conveying and rotationally hanging system" for increasing space utilization rate and saving energy, which was spoken highly of by users and honored "Excellent Equipment Supplier".

Sticking to Mutual Beneficial Cooperation

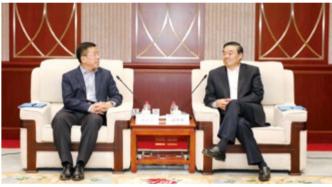
SINOMACH insists on mutual beneficial cooperation with partners. By signing strategic agreements, holding special seminars and other activities, we have strengthened cooperation with stakeholders such as the government, financial institutions and partners. In 2017, the Group signed strategic cooperation agreements with more than 10 organizations, including governments of Henan Province, Qinghai Province and Shandong Province, Tsinghua University, Tianjin University, Beijing Normal University, Guangzhou University and China Zheshang Bank, which helped the Group and the stakeholders to reinforce complementary advantages and share benefits.



▲ Chairman Ren Hongbin attends the 2017 "China for the World" Belt & Road Forum hosted by GE.



Guangzhou University.



Development Bank



China Machinery Industry Federation.



▲ SINOMACH signs the strategic cooperation agreement with ▲ SINOMACH signs the strategic cooperation agreement with the People's Government of Qingdao, Shandong Province.

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Strengthening Work Safety

SINOMACH earnestly implements the decisions and policies on work safety made by the Party Central Committee, the State Council and the SASAC. To strengthen safety management and control, the Company eliminates potential safety hazards from the source, actively performs relevant responsibilities, and conducts regular safety hazard investigations to ensure safe and stable production. In 2017, none of major or more serious work safety accidents occurred.

Underpinning Safety Management

SINOMACH continues to optimize the safety management mechanism, fully implements the safety management policy that "both Party committees and governments are accountable and any post takes responsibility for work safety in performing their duties" to enhance the responsibility for work safety in all processes, and strengthen safety management covering all employees, the entire process, and all aspects. In 2017, SINOMACH continued the accreditation, upgrade and re-evaluation of work safety standards. 132 enterprises reached the work safety standards, an increase of 28 enterprises compared with that of the previous year. Among these enterprises, 2 reached the first class, 66 reached the second class and 64 reached the third class.

Improving Employees' Capacity of Work Safety

SINOMACH strengthens work safety management from the source by vigorously promoting its corporate safety culture and enhancing safety training. We formulated programs for SINOMACH Work Safety Month and Work Safety Tour in 2017. At the same time, each subsidiary actively responded to these plans by carrying out work safety education activities with novel contents and various forms, which have steadily promoted

Clarifying Safety Responsibilities

SINOMACH has further enhanced responsibility performance for work safety and strengthened responsibility assessment. Under the leadership of the Party committee secretary and general manager, the Company broke down the responsibilities for work safety to each individual, and signed the Work Safety Responsibility Statement with its subsidiaries. In 2017, in accordance with the Measures for the Assessment of Work Safety Responsibilities of SINOMACH. 36 subsidiaries were evaluated for work safety responsibility, of which 29 were rated as outstanding companies; besides, the 2017 major hazard list was released. In 2017, the Company has removed altogether 35,064 hidden dangers, and rectified 34,909 hidden safety problems with a rectifying rate of 99.56%.; meanwhile, we conducted 1,680 emergency drills, with 48,785 times of employees participation; there were also 30,085 person times participation in emergency management training sesthe safety culture, improved employees' alertness and emergency handling capabilities and enhanced their capacity of work safety. In 2017, a total of 1,660 work safety training sessions were held by SINOMACH, where employees received training 66,136 times. Our employees also participated in external training programs 5,243 times.

Strengthening Work Safety in Overseas Projects

As a multinational company, SINOMACH always attaches great importance to the operational safety of overseas projects and the wellness and property of employees in foreign countries. In order to improve the safety management of overseas projects, the Company has developed the safety risk prevention and control mechanism as well as safety assurance system for the entire process of overseas projects. In 2017. SINOMACH issued the Regulations on Safety Management of Overseas Projects and revised the Comprehensive Emergency Plan for Work Safety Accidents and Overseas Emergencies and the Special Emergency Plan for Overseas Security Incidents, which gradually standardized the safety management of overseas projects. In addition, to minimize safety risks, the Company has been developing the comprehensive risk prevention system, and has dispatched personnel to carry out safety inspections at overseas projects.



■ Carrying out safety education activities

Promoting Community Development

Communities are vital to the human society and influenced by the long-term interaction among environmental, political, and cultural factors. SINOMACH attaches great importance to the impact of the construction and operation of its projects on the surrounding and integrates itself into community development. The Company vigorously performs social responsibilities to advance the infrastructure construction and improve people's livelihood, contributing to the harmonious development of the community.

Participating in Community Development

Infrastructure Construction

We regard the local community as our home and strive to improve the life of local residents by making full use of our resources to support the infrastructure construction and promote community development, so as to enable local communities to benefit from the development of the Company.

Disaster Relief

As a key central SOE, SINOMACH shall shoulder more social responsibilities. In the event of major disasters, SINOMACH adheres to the concept of "always being the first to respond and carry out relief operations", provides assistance to people in disaster-stricken areas and help them rebuild their homes.



▲ Sending relief supplies to residents in the flood-stricken area in Sri Lanka



General Secretary of the CPC Central Committee, Chinese President Xi Jinping and General Secretary of the Lao People's Revolutionary Party Central Committee, Lao President Boungnang Vorachith, attend the groundbreaking ceremony of the Mahosot Hospital project designed and managed by SINOMACH.



▲ The water supply system in Namibe, Angola provides clean and safe drinking water for local residents.

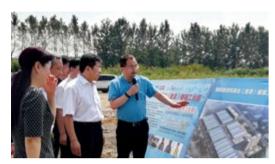
One heart, one road — SINOMACH HEAVY INDUSTRY conducts disaster relief operations at the front-line



On June 24, 2017, the Fugui Mountain in Xincun Villager Group, Xinmo Village, Diexi Town, Mao County, Aba prefecture, Sichuan Province, collapsed from the half way up and blocked about 2 kilometers of a local river. SINOMACH HEAVY INDUSTRY responded promptly to the unified direction of the Disaster Relief Office and dispatched excavators to the disaster area. To ensure the smooth flow of the "life channel" and provide effective support for rescue work, SINOMACH HEAVY INDUSTRY paid close attention to the situation and launched the corresponding emergency rescue plan to quickly dispatch engineering machinery equipment and spared parts to provide comprehensive support for disaster relief at any time.

Supporting Poverty Alleviation

In accordance with related policies and plans of the Party Central Committee, the State Council and local governments, SINOMACH has carried out targeted poverty alleviation operations in some counties (townships). With its own advantages, the Company has made effective efforts in industrial development, education and training, and infrastructure construction, etc. It adheres to the strategy of simultaneously promoting education, industry development, and people's livelihood in poverty-stricken areas and has initially formed a targeted poverty alleviation model of "take root in education, develop industry, support agricultural machinery, and facilitate people's livelihood", aiming to help poverty-stricken areas improve their self-development capabilities and get all local people out of poverty.



Chairman Ren Hongbin leads the team to inspect poverty alleviation operations in Huaibin County, Henan Province.



Shi Ke, Secretary of the Party committee, leads the team to inspect poverty alleviation operations in Chaotian District, Guangyuan, Sichuan Province.

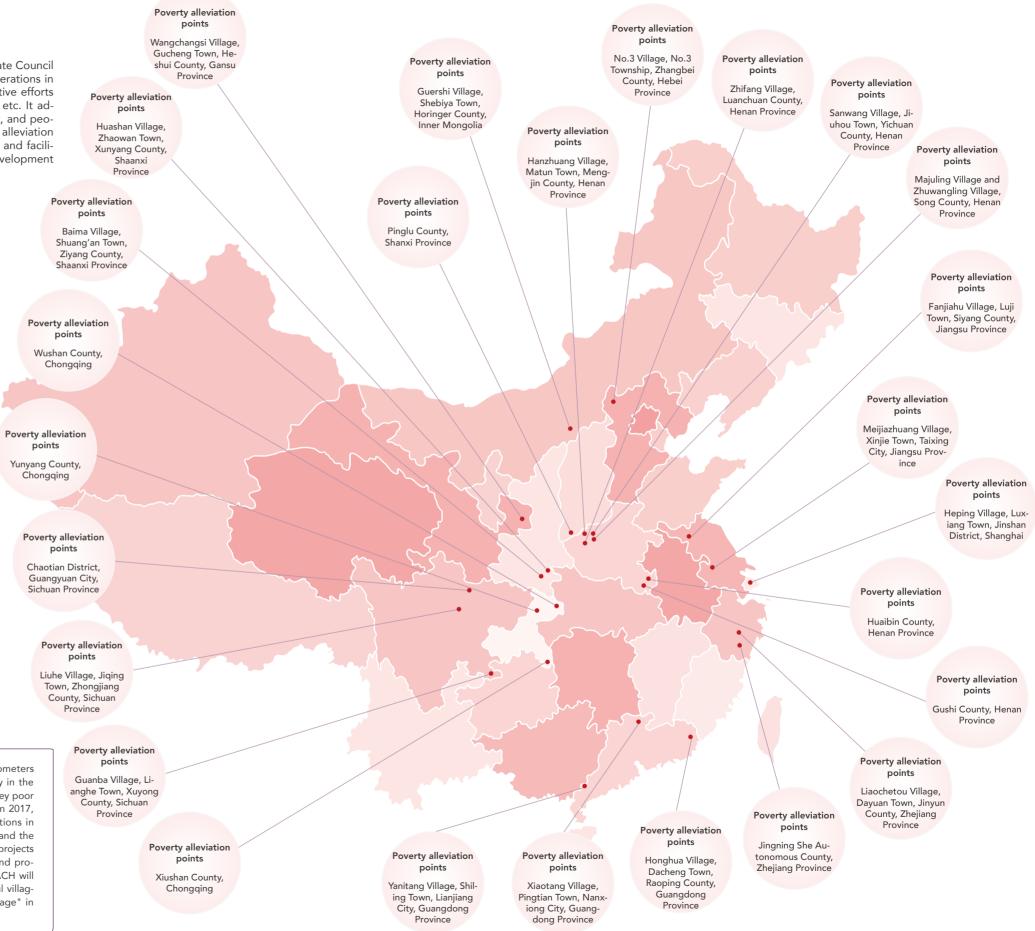


General Manager Xu Jian visits SINOMACH Motivational School and learns about the education situation.

points Poverty alleviation Wushan County, Chongqing Poverty alleviation points Yunyang County, Chongqing Poverty alleviation points Chaotian District Guangyuan City, Sichuan Province points County, Sichuan Province

Building beautiful villages with concerted efforts

Sunpeng Village, located in the southwest of Guolutan Town of Gushi County, is 25 kilometers from the urban area of the county and 6 kilometers from the town. The village is mainly in the plain area and consists of 15 villager groups with 621 households and 2,708 people. As a key poor village in Gushi County, it had 188 registered poor households with 729 people in 2014. In 2017, SINOMACH vigorously supported the development of Sunpeng Village through operations in poverty alleviation, infrastructure development, development of characteristic industries, and the construction of beautiful rural livable environment. The Company also plans to carry out projects to further improve local infrastructure, expand the SINOMACH breeding community, and provide lighting project of street lamps on major roads in the village. In the future, SINOMACH will unswervingly complete poverty alleviation work and facilitate the construction of beautiful villages. Sunpeng Village is expected to have tremendous changes and become a "model village" in SINOMACH's poverty alleviation project in Gushi.



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Promoting Public Welfare in Communities

While pursuing its own development, SINOMACH actively contributes to society and is committed to building a harmonious society by organizing or participating in various activities such as Umbrella Sharing and Love Knows No Borders.

SINOMACH participates in the 9th "Love Knows No Borders" international charity sale activity held by the Ministry of Foreign Affairs

On October 29, 2017, the 9th "Love Knows No Borders" international charity sale activity themed "international charity sale for healthy villages in Yunnan" was held at Beijing Workers' Stadium. The funds raised will be used by China Foundation for Poverty Alleviation to build clinics in impoverished areas in Malipo County and Jinping County in Yunnan Province. SINOMACH donated RMB 1,100,000 at the fundraiser in total, where it was awarded the certificate of donation by the Foreign Minister Wang Yi and his wife Qian Wei.

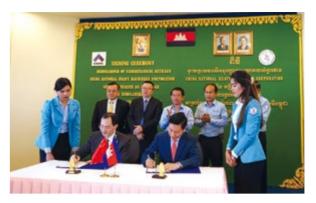


Sending positive energy with shared umbrellas

Because of SINOMACH, you will never walk alone. The Umbrella Sharing campaign officially launched in 2017 was the first step for SINOMACH to realize the dream of public welfare. As Chairman Ren Hongbin said, we have been doing our best to give back to the community, and I hope our actions will enable our employees, customers and more people to feel love, find happiness and deliver warmth, so that the world will become a harmonious whole. In Umbrella Sharing's design philosophy, umbrellas not only protect people from the rain, but also serve as a symbol of good cultures, warm stories, and excellent brand. It also represents SINOMACH's commitment to becoming "an outstanding company, a friendly neighbor, and a prestigious central SOE". The initial Umbrella Sharing activity around the office area has proven successful.

In the future, SINOMACH will carry out a series of activities such as story sharing, gratitude participation, and giving back to society based on the Umbrella Sharing campaign.





▲ Signing the Memorandum on Establishing the CHMC Scholarship with Electricite Du Cambodge (EDC)



▲ Organizing voluntary blood donation activity



Carrying out philosophical fairy tale reading activity for children in cooperation with "COGITO BEAR"



Visiting an orphanage in Uzbekistan, and bringing warmth to the children

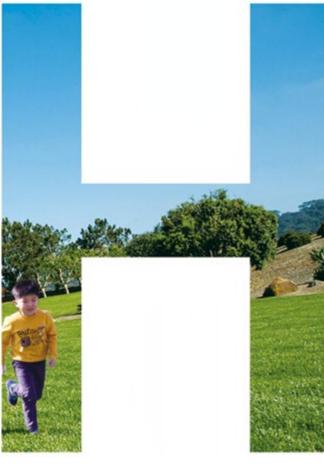


▲ Construction and Installation of the Combined Cycle Power Plant SOYO I in Angola builds the "September 17 School" and donates 1,000 water purification kits to the locals.



▲ Donating USD 30,000 to Smalyavichy District in Belarus for cultural exchange





APPINESS

Number of employees

150,526

Number of new employees

23,150

Signing rate of labor contracts

100%

Love fund

RMB **3.262** million

Happy SINOMACH

Rringing Out D Bringing Our Dream to Fruition

> SINOMACH, while becoming stronger and better, puts people first and enables employees to share development fruits, have decent work and live happily. We push forward the establishment of Socialist Core Value System and Group corporate culture, encourage the employee to build up healthy values, and create harmonious cultural atmosphere

for them. We also strengthen the team building, keep career growth channel smooth, support employees to participate in business management and advance democratic management. We highly value humanistic care, and emphasize the fairness and justice so as to better protect the interests and various rights of employees.

Protecting Employees' Rights and Interests

SINOMACH attaches importance to the individual values of employees, protects their interests and rights, and strives to create good culture atmosphere as well as working conditions and build impartial and harmonious labor relations, which will bring employees more sense of achievement, happiness and safety.

Management

By strictly abiding by laws and regulations, we stick to diverse and equal employment, forbid child labor and forced labor and fight against discrimination because of race and gender, etc. In 2017, SINOMACH has 150.526 employees in total, among which 139,017 are on the job, 23,150 are new employees and 38,684 are female. Female managers account for 32.5% of the management board, and all full-time employees sign the labor contracts.

Regulating Employment Optimizing Salary and Welfare

We follow the principle of "efficiency first while considering fairness" to improve the linkage mechanism of performance evaluation and total wages. respect the value contribution and fully inspire the initiativity and creativity of employees. We also optimize the welfare system to provide diversified forms of welfare and develop their loyalty to the Company.

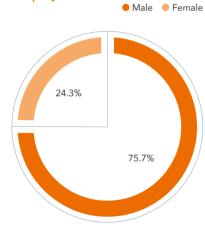
Guaranteeing Occupational Health and Safety

We have enhanced occupational health management and source governance of occupational hazards. By holding occupational disease prevention and training, we provide our employees with safe production facilities and tools to prevent safety accident and occupational disease. In 2017, the Group conducted quantitative assessment of occupational health management work in all subsidiries, and the occupational hazardous factors were effectively controlled and managed.

Strengthening Democratic Management

We adopt democratic management system, constantly improve the systems of Worker Representative Congress and labor union and disclose the corporate affairs to the public, to quarantee employees' rights to know, to supervise, to suggest, etc., by which we have enhanced employees' sense of belonging and cohesiveness, and promoted the harmonious development of the Company. In 2017, 95% second-tier subsidiaries established labor unions.

Ratio of Male to Female **Employees**

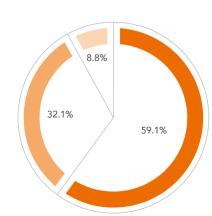


Employee Education Background



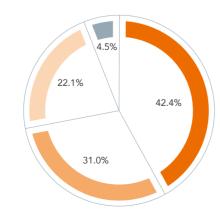
Master or higher

Bachelor



Age Distribution

- 35 years old and below
- **36** 45 years old
- 46 55 years old
- 56 years old and above



Expanding Growth Space for **Employees**

SINOMACH values the talents and implements the strategy of empowering enterprises by cultivating talents. We provide employees with vocational training and education, help plan employee career development and also pay special attention to the professional development of young employees. We employ many excellent young people, aiming to realize the win-win result of talent and the Company.

Online training

Developing internal courses

Participants in online learning

Off-line training

Class for senior managers and cadres

Participants

Providing Employees with Vocational Training and Education

We improve the vocational training and education system in order to constantly improve employees' skills and business capacity and help them have long-term development vision. In 2017, we deepened the educational approaches by combing online and offline training, formal training and informal learning, providing support for the Group's talent training and personal growth.



▲ The first SINOMACH Lecture in 2017

Action learning workshop for young and middle-aged cadres

On May 5, 2017, SINOMACH Action Learning Workshop for Young and Middle-aged Cadres 2017 was held in Beijing. Shi Ke, Secretary of the Party Committee of SINOMACH, and Liu Hongyi, director of the Training Center of Chinese Academy of Governance, attended the opening ceremony. Following the approach of " knowledge learning, experience sharing, innovative and collective study and action", the workshop adopted special lectures, case studies, sand-table exercises and other forms of training to focus on key issues, like market development, business synergy and factor innovation, and propose solutions, which would be translated into practice in their work.



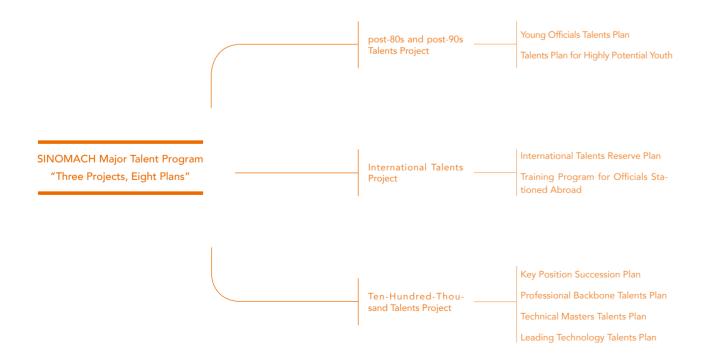
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Planning Career Development

We continuously improve the career promotion and development system, paying attention to the growth of every employee. According to the individual ability of employees, we choose suitable career promotion paths and set up individualized career development plans for them. In this way, we strive to create high-quality talents for the Group and lay the foundation for talents reserve.



▲ The 21st SINOMACH Senior Workshops for Senior Managers and Cadres



Caring for Employees

SINOMACH pays attention to every little thing of employees and care for employees in need, female employees and overseas employees. We strengthen our service consciousness, and are concerned about the lives of retirees. By carrying out various recreational activities, we try to create a healthy, comfortable and harmonious working environment to bring the SINOMACH warmth for employees.

Helping Employees in Need

The Company cares about employees in need and helps them solve their life difficulties. In 2017, SINOMACH Love Fund provided a total of RMB 3.262 million to help employees in need, poor students, and employees with serous diseases.

RMB **3.262** million

Number of recipients

Caring for Retirees

We take care of retirees by visiting them and creating conditions to make them enjoy a happy old age.



RMB 1.536 million RMB 476,000 RMB 1.25 million

Caring for Female Employees

SINOMACH focuses on safeguarding the legitimate rights and interests and special interests of female employees. We have set up a committee of femle employees, and formulated a series of thoughtful measures targeted at female employees. Our efforts have made SINOMACH become the ideal workplace for female employees, winning their recognition.



▲ SINOMACHINT holds Sunshine Salon themed with the Arts of Inserting Flowers to celebrate the Women's Day



▲ Chairman Ren Hongbin visits needy employees.

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▲ SINOMACH awards the Overseas Staff Contribution Award to Bangladesh staff who have worked for the Group for over 20 years.

Caring for Overseas Employees

We care for overseas employees and actively carry out cultural exchanges activities to continuously enhance their sense of belonging and promote exchanges and cooperation among employees from different countries.



▲ Holding the celebration activity of Mid-Autumn Festival in Ecuador



▲ Employee parent-children activity



▲ Celebrating May Fourth Youth Day activity and Youth Book Club book reading activity



▲ Youth fellowship activity for employees of subsidiaries in Beijing

Work-life Balance

Employees are our most important assets. We care for them, and pay attention to their balance of work and life. We provide various forms of entertainment, such as book clubs, speech contests, and basketball matches, so as to enrich their amateur life and create a harmonious and happy SINOMACH family.



▲ Silk Road – CUCED Cup men's basketball invitational tournament



▲ I grew up with SINOMACH speech contest ends successfully

Outlook

CSR Commitments

·Consolidating basic management to improve management level

- ·Keeping stable operations to promote perfor mance improvement
- Optimizing resource integration to create shared values

·Continuing to enhance technological innovation ·Keeping promoting management innovation ·Vigorously deepening corporate reform



CSR Field

creating

INOMACH

·Improving the green management system ·Accelerating the promotion of green design ·Implementing green production and manufacturing

·Sticking to green application and promotion ·Carrying out energy saving and emission reduction

·Advocating environmental protection



·Developing together with partners for mutual benefits and win-win results ·Consolidating work safety to eliminate safety hazards

 $\cdot \text{Engaging}$ in social welfare to build a harmonious community



 $\cdot \text{Protecting employees' rights and interests,}$ for common growth

·Expanding growth space for employees to realize shared development of the Group and employees

·Caring for employees to make them enjoy happiness in SINOMACH



CSR Actions

Improving the management system and keeping improving strategy management, financial management, over risk management, informatization management and so on

Optimizing product and business structures and exploring intelligent and advanced areas
Enhancing the support of business sectors and strengthening the overall advantage of the group

·Improving system and mechanisms and fostering scientific research and service platforms ·Increasing technological investment, and enhancing technological R&D

Participating in the formulation of industry standards and leading industry development
Improving management and control of the group to realize quality and efficiency improvement
Innovating in business modes and optimizing industry upgrade

·Keeping optimizing the environment management system and creating a green management platform

·Innovating in the traditional design, manufacturing technology and production mode

·Comprehensively promoting green manufacturing to realize whole-process green management ·Guiding employees to promote green office and participating in various environmental protection and public welfare activities to guide the public to pursue green consumption

Deepening cooperation with stakeholders to create values for customers and create a responsible value chain

Improving the work safety system, promoting the construction of safety culture, and carrying out investigation and control of safety hazards to strictly control work safety accidents, and establishing and improving the safety risk prevention and control mechanism of overseas projects

·Implementing targeted poverty alleviation in targeted poverty alleviation points to promote the development of community culture and education, and improve community infrastructure

·Standardizing employment management, optimizing salary and welfare, guaranteeing occupational health and safety, and strengthening democratic management

·Establishing and improving the employee training and growth mechanism to improve employees' skills and business capacity

·Caring for retirees, assisting employees in need, taking care of female employees and overseas employees

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Comparison Table with Sustainable

	Sustainable Development Goals	SINOMACH Action Framework	SINOMACH Typical Measures and Actions
NO POVERTY	The first goal End poverty in all its forms everywhere	Sticking to the basic national strategy or targeted poverty alleviation and elimination; helping win the battle against poverty through targeted poverty alleviation and pair-	Promoting targeted poverty allevi- ation through education, industrial promoting agricultural mechaniza- tion, and improving people's liveli-
		ing assistance	hood
ERO JNGER	The second goal		The research on the key technology
IGER	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Enhancing independent innovation capacity in mechanics, and improving competitiveness	equipment for wine brewery manu facturing has been succeeded; Inde pendently developing cloud service platform for agricultural mechaniza tion
HEALTH /ELL-BEING	The third goal	Valuing amplayage' health practic	
L-BEING	Ensure healthy lives and promote well-being for all at all ages	Valuing employees' health, practic- ing occupational health and safety measures, and safeguarding em- ployees' mental and physical health and safety	Establishing and improving employ- ee welfare and health examination system, with 100% coverage of so- cial security
,	The fourth goal		
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Improving educational environment and giving more children in pov- erty-stricken regions the access to quality education	Actively alleviating poverty through education and improving education in poverty-stricken regions
R	The fifth goal		Sticking to employment equity and eliminating gender discrimination
7	Achieve gender equality and empower all women and girls	Eliminating gender bias and pro- moting gender equality	Providing equal pay to female and male employees; Paying attention to protecting female employees' right and interests, organizing brisk walk ing special activities on Women' Day
N WATER	The sixth goal	Optimizing the environment man-	Delivering the first multi-functiona
INITATION	Ensure availability and sustainable management of water and sanitation for all	agement system and building a green management platform cover- ing the whole process of designing, production, R&D and promotion	air dust cleaner with the function o environmental protection in China Carrying out special activities fo energy conservation and environ mental protection
DABLE AND	The seventh goal	Developing an energy-saving and	CFMC made new progress in the field
ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for all	eco-friendly industrial model and carrying out new energy and nuclear energy projects to optimize the en- ergy mix	of photovoltaic power generation CPF created Guangdong Maoming Energy Project; Tenaga 49.5MW Wind Power Project
ORK AND	The eighth goal	Sticking to employment equity and	Improving the mechanism of ten- dering and procurement to stand
MIC GROWTH	Promote sustained, inclusive and sustainable economic growth, full	eliminating discrimination due to religion, race or skin color; Strength-	ardize the process; Signing strategi cooperation agreements with mor

ening communication and exchange

with suppliers and creating a re-

sponsible value chain

than ten organizations to realize the

complementary advantages and share

interests between enterprises and



	Sustainable Development Goals	SINOMACH Action Framework	SINOMACH Typical Measures and Actions
DUSTRY, INNOVATION NO INFRASTRUCTURE	The ninth goal Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Strengthening safety management and control in project construction; Continuing to increase investment in research and development	Increasing investment in technological innovation. In 2017, RMB 6.20 billion was invested in technological innovation
REDUCED NEQUALITIES	The tenth goal Reduce inequality within and among countries	Proactively shouldering social responsibilities of local regions where overseas projects operate and conducting overseas public welfare activities	Sending relief supplies to residents i the flood-stricken area in Sri Lanka Donating teaching materials, school supplies and sporting goods to pr mary schools of Laos
SUSTAINABLE CITIES SUND COMMUNITIES	The eleventh goal Make cities and human settlements inclusive, safe, resilient and sustainable	Sticking to work safety and strength- ening the accountability system; Carrying out post-disaster recon- struction, and relevant work	SINOMACH HEAVY INDUSTRY cor ducted disaster relief operations i Mao County to ensure the "passag of life" unimpeded
RESPONSIBLE CONSUMPTION AND PRODUCTION	The twelfth goal Ensure sustainable consumption and production patterns	Using resources and energy highly efficiently to reduce waste emission; Developing the sharing to use resources efficiently	SINOMACH AUTO speeded up th progress of the new energy vehicl project; Carrying out Umbrella Sha ing activities
CLIMATE	The thirteenth goal Take urgent action to combat climate change and its impacts	Reducing the impact of production and operation on the environment through adopting innovative tech- nologies and greener and low-car- bon operation models	New IPPR Plaza Project implement ed green design, green constructio and green operation to reduce th impact on the environment
LIFE BELOW WATER	The fourteenth goal Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Implementing the "Made in China 2025" strategy and promoting industries related to marine resources development	The 10,000-meter deep ocean bot tom seismometer co-developed b China Geological Equipment Grou Co., Ltd
ON LAND	The fifteenth goal Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradationand halt biodiversity loss	Regarding biodiversity protection as an important element in project construction management	Taking part in Earth Day campaign actively carrying out charitable tre planting activities and desert tre planting activities
PEACE, JUSTICE AND STRONG INSTITUTIONS	The sixteenth goal Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	Opposing bribery in business and strengthening honest administration; Combating corruption and upholding integrity	Carrying out special training on 19t CPC National Congress; Strengther ing the legal risk assessment in th business activities
PARTNERSHIPS FOR THE GOALS	The seventeenth goal Strengthen the means of implementation and revitalize the global partnership for sustainable development	Implementing national strategies including the Belt and Road Initiative, and vigorously expanding the overseas market	Participate in the Belt and Road Forum for International Cooperation Boao Forum for Asia and other International Conferences

decent work for all

and productive employment and

Comparison Table with the Ten Principles of UN Global Compact

	UN Global Compact's Ten Principles	Progress in 2017
⊖ ≡ Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights	Respecting and safeguarding internationally recognized norms and standards to protect human rights and integrating respect for human rights and labor practices principle into corporate strategy and daily operation
Human Rights	Principle 2: Make sure that they are not complicit in human rights abuses	Establishing and improving the labor union system to promote democratic communication and participation
	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Strictly abiding by the relevant laws, regulations and policies of the countries where we operates, following international conventions in human rights, labor, etc.
Labor	Principle 4: The elimination of all forms of forced and compulsory labor	Resolutely eliminating child labor, forced labor and compulsory labor
Labor	Principle 5: The effective abolition of child labor	
	Principle 6: The elimination of discrimination in respect of employment and occupation	Sticking to equal and law-abiding employment, and eliminating all forms of employment discrimination
٦	Principle 7: Businesses should support a precautionary approach to environmental challenges	Attaching great importance to low-carbon and eco-friendly development and being devoted to the integration of environmental protection and corporate strategy
Environment	Principle 8: Undertake initiatives to promote greater environmental responsibility	Strengthening technological innovation, vigorously promoting the use of new energy, practicing green de-
	Principle 9: Encourage the development and diffusion of environmentally friendly technologies	sign and constructing green projects to push forward environmental protection and enhance environmental performance
Anti-Corruption	Principle 10: Businesses should work against corruption in all its forms,including extortion and bribery	Deepening punishment and prevention system build- ing, and establishing a long-term anti-corruption mech- anism by education and risk prevention

Feedback Form

Distinguished readers,

Thank you for reading this report. We expect you to share your opinions and suggestions over this report to help us improve our report compilation and our social responsibility performance. You are welcomed to fill in the following questionnaire and send it to us through the contact at the bottom of this page. We are grateful for your support of SINOMACH's social responsibility work!

□ Shareholder □ Employee □ Community/the Public □ I	□ Customer ndustrial association			vernment (Please spec	□ Peer :ify)
Generally, How do you thir	nk of this report?				
□ Very Good □ Good □ F	Fairly Good □ Po	or 🗆 Very	Poor		
Please evaluate the report Dimension	Very Good	Good	Fairly Good	Poor	Very Poor
Difficusion			,		,
Information Disclosure					
Information Disclosure					

☐ Transformation and upgrading	 Risk management and control 	□ Technological innovation
☐ Sound operation	□ Law-abiding behaviors	□ Corporate governance
☐ Environmental protection	☐ Product quality	□ Employees' development
☐ Employees' rights and interests	□ Customer services	□ Work safety
, , ,	□ Community development	,
□ Social welfare □ Partners and cooperation	□ Community development	□ Industrial development



Address: No.3 Danling Street, Haidian District, Beijing, P.R.China P.C: 100080 Contact person: He Yuan, Party Committee Department Tel.: 86-10-82606741 Fax: 86-10-82688724 E-mail: heyuan@sinomach.com.cn





Work Together, Win Together



China National Machinery Industry Corporation

Address: No.3 Danling Street, Haidian District, Beijing

P.C: 100080

Tel.: 86 - 10 - 82688888 Fax: 86 - 10 - 82688811

Website: www.sinomach.com.cn



SINOMACH WeChat



