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東方電氣抖音

DEC 東方電氣股份有限公司
DONGFANG ELECTRIC CO., LTD.

2020

環境、社會及管治報告

Environmental, Social and
Governance Report

東方電氣 2020 環境、社會及管治報告

DONGFANG ELECTRIC CO., LTD. Environmental, Social and Governance (2020) Report



關於本報告

About the Report

時間範圍

Reporting Period

2020年1月1日-12月31日，部分表述及數據適當追溯以前年份。

This report covers the period from January 1 to December 31, 2020. Part of the content is beyond the above time range.

發布周期

Reporting Cycle

本報告為年度報告，是東方電氣股份有限公司自2017年以來發布的第5份環境、社會和管治報告。

This is an annual report. It is the fifth Environmental, Social and Governance (ESG) Report issued by Dongfang Electric Co., Ltd. since 2017.

編制依據

Preparation Basis

本報告參照國家標準《社會責任報告編寫指南》(GB/T 36001-2015)和香港聯合交易所《環境、社會及管治報告指引》編寫。

This report is prepared with reference to the *Guidance on Social Responsibility Reporting (GB/T 36001-2015)* and the *Environmental, Social, and Governance (ESG) Reporting Guide* by The Stock Exchange of Hong Kong Ltd.

稱謂說明

Designations

為了便于表述和方便閱讀，“東方電氣股份有限公司”在本報告中也以“東方電氣”表示。

In order to facilitate this presentation, "Dongfang Electric Co., Ltd." is also expressed as "DEC", "the Company", or "we" throughout this report.

報告範圍

Reporting Scope

東方電氣股份有限公司及其附屬公司。

Dongfang Electric Co., Ltd. and its subsidiaries

數據來源

Data Sources

本報告使用數據來自東方電氣的內部資料和相關統計資料。

The data used in this report is from the internal data and relevant statistical data of Dongfang Electric Co., Ltd.

可靠性保證

Reliability Assurance

東方電氣董事會及全體董事保證本報告內容不存在任何虛假記載、誤導性陳述或重大遺漏，並對其內容的真實性、準確性和完整性承擔個別及連帶責任。

The Board of Directors and all directors of Dongfang Electric Co., Ltd. guarantee that there is no fictitious record, misleading statement, or material omission in this report, and are responsible for the authenticity, accuracy, and completeness of the content.

報告版本

Report Version

本報告為電子版。如需打印，請盡量選用環保再生紙。

This report is available in electronic version. If you want to print it, please choose biodegradable environment-friendly recycled paper.

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關於東方電氣

公司簡介

東方電氣股份有限公司（以下簡稱東方電氣），總部位於四川省成都市，是中國東方電氣集團有限公司控股特大型企業。歷經 60 餘年的發展，已成為全球最大的發電設備供應商和電站工程總承包商之一，分別在上海證券交易所（代碼 600875）和香港聯交所（代碼 1072）上市。

截至 2020 年底，東方電氣累計生產發電設備已超過 5.8 億千瓦，繼續在全球同行業中保持領先地位。目前，東方電氣的產品和服務已出口到美國、加拿大、印度、巴基斯坦、越南、印度尼西亞、沙特、波黑、瑞典、巴西等近 80 個國家和地區。

東方電氣作為國家重大技術裝備國產化基地、國家級企業技術中心，擁有中國發電設備製造行業中一流的綜合技術開發能力。通過自主開發、產學研合作，形成了一批擁有自主知識產權的重大技術裝備產品，具備了大型水電、火電、核電、氣電、風電及太陽能發電設備的開發、設計、製造、銷售、設備供應及電站工程總承包能力。可批量研制 1000 兆瓦等級水輪發電機組、1350 兆瓦等級超超臨界火電機組、1000 兆瓦 -1750 兆瓦等級核電機組、重型燃氣輪機設備、直驅和雙饋全系列風力發電機組、高效太陽能電站設備、氫燃料電池系統、大型環保及水處理設備、電力電子與控制系統、儲能電池系統、智能裝備等產品。

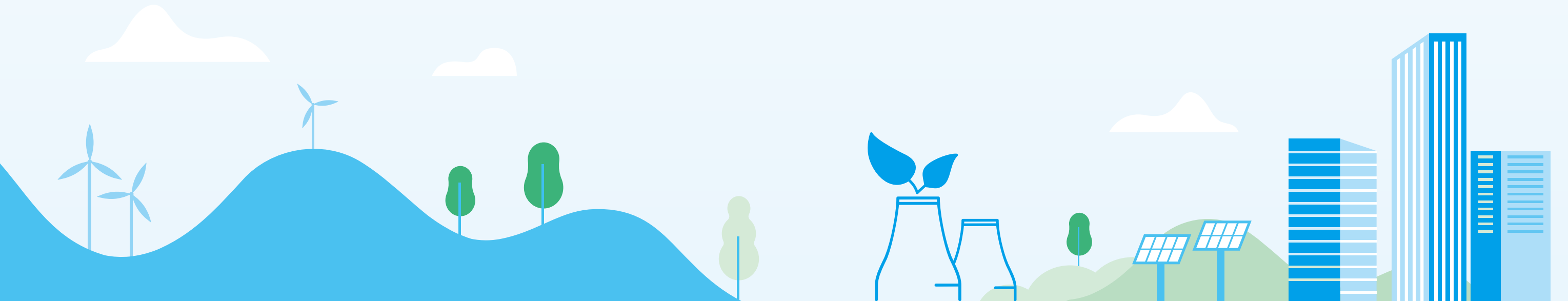
About Us

Company Profile

Dongfang Electric Co.,Ltd (hereinafter referred to as DEC), headquartered in Chengdu, Sichuan Province, is a large-scale enterprise held by Dongfang Electric Corporation. With the development of more than 60 years, DEC has become one of the world's largest suppliers of electric power generation equipment and general contractors of power station projects. Now it is listed on the Shanghai Stock Exchange (Stock Code: 600875) and the Stock Exchange of Hong Kong (Stock Code: 1072).

As of the end of 2020, the capacity of electric power generators produced by DEC has exceeded 580 GW, which is top-ranked across the industry. To date, the DEC products and services have been exported to nearly 80 countries and regions including the United States, Canada, India, Pakistan, Vietnam, Indonesia, Saudi Arabia, Bosnia and Herzegovina, Sweden, and Brazil.

DEC is recognized as a national strategic base for heavy-duty machinery and equipment, as well as a National Corporate Technology Center. The Company's comprehensive technical R&D abilities are among the best in Chinese manufacturers in electric power generators. Through ingenious development and industry-university-research cooperation, DEC now owns a quantity of heavy-duty machinery and equipment with proprietary intellectual property rights. DEC is capable of general-contracting projects in developing, designing, manufacturing, selling, and supplying hydropower, thermal power, nuclear power, gas power, winder power and solar power generators. The Company is also able to batch develop 1000 MW hydro turbines, 1350 MW ultra-supercritical thermoelectric generators, 1000MW-1750MW nuclear power equipment, heavy-duty gas turbines, a whole series of direct-driven and double-fed wind turbines, highly-efficient solar energy equipment, hydrogen fuel cell system, large-scale environmental conservation and water treatment equipment, electric & electronic automatic control systems, energy storage battery system, intelligent equipment, etc.



關鍵績效

Key Performance

經濟績效指標

Economic



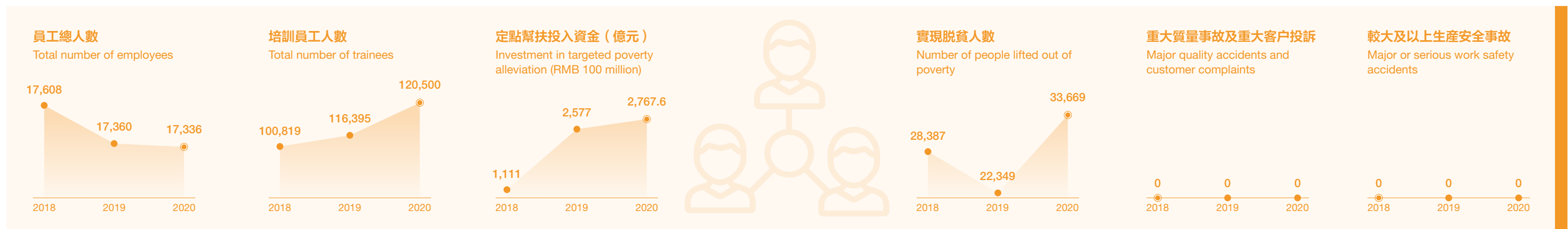
環境績效指標

Environmental



社會績效指標

Social



公司治理

Corporate Governance

東方電氣嚴格遵守相關法律要求，堅持合規運營，積極完善公司治理制度，提高治理水平，以規範良好的企業管治奠定可持續發展之路。

In strict accordance with laws and regulations, DEC keeps compliance operations and improves corporate governance by proactively upgrading governance systems, which lays a foundation for sustainable development.

經營管理

Operation and Management

東方電氣秉持“科學規範、精益高效”的管理理念，持續深化改革，推進企業高質量發展。

Pursuing scientific, standard, lean and efficient management, DEC deepens corporate reform and promotes high-quality development.

深化改革

Deepening Reform

不斷深入推進“三項制度”，大力實施“1532”改革工程，實現二級企業經理層任期制和契約化管理全覆蓋，配套建立“強激勵硬約束”考核評價機制，領導人員“全體起立、競聘坐著”改革舉措入選國務院國資委《改革樣本：國企改革“雙百行動”案例集》；推動混合所有制改革“破冰”，東方風電、東方氫能完成戰略投資者引入，實現股權混合，同步推進員工持股改革，建立更為市場化、更加高效的經營管理機制；完成全部退休人員社會化管理，社會職能移交實現“清零銷賬”。

To deepen and promote the institutional reforms, DEC goes all out to implement the “1532” reform project, which refers to one mainstay, five special campaigns, three breakthroughs, and two promotions. Term system and contractual management are adopted for all executives of secondary subsidiaries, and an evaluation system featuring strong incentives and strict constraints is established. As stipulated by one of the reform measures, which is included in the *Reform Sample-State-owned Enterprise Reform “Double Hundred Action” Case Collection*, compiled by the State-owned Assets Supervision and Administration Commission of the State Council, all employees are eligible for leading positions in the companies, and they have equal chances of being promoted or demoted. DEC has also spearheaded the mixed-ownership reform. Dongfang Electric Wind Power Co.,Ltd and Dongfang Electric Fuel Cell Technology have introduced strategic investors, achieving mixed ownership. Rules for employee stock ownership are reformed as well, with a more market-oriented and efficient operation and management mechanism. DEC has completed the social management of all retirees, the transfer of social functions has rounded off with nothing left untreated.

數字化轉型

Digital Transformation

深入推進數字化技術在裝備製造領域的應用，大力開展數字化車間示範建設。2020年3月25日，“大型清潔高效發電裝備智能制造數字化車間建設項目”全面完成并以優異的成績通過國家工信部專家組驗收，成為行業智能制造數字化車間建設的示範引領工程。建成後的數字化車間，生產效率提高48%，運營成本降低31.9%，產品研製周期縮短30.7%，產品不良品率降低20%，能源利用率提高57.3%，每年可為企業帶來約1.5億元的直接經濟效益。



DEC integrates digital technologies in equipment manufacture and redoubles the efforts in demonstrative digital workshops. On March 25, 2020, the “project of constructing the digital workshop for intelligent manufacturing of large-scale clean and efficient power generators” was completed and passed the inspection and acceptance by the expert group of the Ministry of Industry and Information Technology with good performances. The project has become a demonstrative one leading the construction of the industry’s digital workshop for intelligent manufacturing. Upon completion of the workshop, the production efficiency is increased by 48% and the energy utilization rate by 57.3%. The operating cost is reduced by 31.9%, the defective product rate by 20%, and the product development time by 30.7%. Every year, the workshop brings to the Company the direct economic benefits of around RMB 150 million.

管理提升

Upgrading Management

對標世界一流企業開展管理提升專項行動，以世界一流企業為標杆，找出差距和不足，有針對性地採取措施，推進管理體系、管理能力現代化。

Benchmarking the world-class companies against best corporate management, DEC launches special campaigns to upgrade management. Targeting the gaps and measures are taken to modernize the management system and capability.

對標戰略管理水平，
找出戰略引領能力的差距
Identifying gaps in strategic guidance by
benchmarking strategic management

對標組織管理水平，
找出科學管控制能力的差距
Identifying gaps in reasonable management
and control by benchmarking organization

對標價值管理水平，
找出價值創造能力的差距
Identifying gaps in value creation by
benchmarking value management

對標營銷服務水平，
找出市場拓展能力的差距
Identifying gaps in market expansion by
benchmarking marketing services



對標科技管理水平，
找出自主創新能力的差距
Identifying gaps in innovation by
benchmarking sci-tech management

對標風險管理水平，
找出合規經營能力的差距
Identifying gaps in compliance operations
by benchmarking risk management

對標人力資源管理水平，
找出科學選人用人能力的差距
Identifying gaps in talent selection and
placement by benchmarking human
resource management

對標信息化管理水平，
找出系統集成能力的差距
Identifying gaps in system integration by
benchmarking information management

依法合規 Compliance with Laws and Regulations

嚴格遵循《公司法》《證券法》《上市公司治理準則》等法律法規要求，開展信息披露、強化風險管理、加強反腐倡廉，保障公司合規運營。

DEC discloses information, enhances risk management, counters corruption, and guarantees compliance operations in strict accordance with laws and regulations, including the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, and the *Code of Corporate Governance for Listed Companies in China*.

投資者關係管理 Investor Relations Management

嚴格遵守上市公司信息披露要求，持續組織年報、季報業績說明會和路演活動，確保及時完整的信息披露；通過諮詢電話、電子郵件、接待投資者來訪、上證 E 互動平臺、公司專頁、證監局投資者平臺等，做好與投資者的日常溝通，並進一步規範投資者接待安排流程。2020 年，按時發布年報、季度報告及 A 股限制性股票激勵項目等信息，共進行 190 項信息披露，其中上交所 87 項，聯交所 103 項。

DEC organizes briefings of annual reports and quarterly performances, as well as roadshows, in line with the information disclosure requirements for listed companies, ensuring timely and complete information disclosure. Through various channels including consultation hotlines, emails, investor visits, SSE E-interactive platform, the company webpage, and investor platforms under the investor platform of China Securities Regulatory Commission, the Company keeps in touch with investors and further standardizes the procedures for investor receptions. In 2020, the annual report, quarterly report, and information about incentive projects on A-share restricted stocks were released on time. A total of 190 pieces of information were disclosed, 87 to the Shanghai Stock Exchange and 103 to the Hong Kong Stock Exchange.

風險管控 Risk Management

發布重大風險管控計劃，對 8 類風險、40 項風險因素提出了 76 項管控措施計劃，按季度落實重大風險的動態管控；建立風險預警指標管理信息系統，對涉及人事、財務、運營、研發、質量、安全 15 項指標按月實施監測，實現風險的定量識別、分析與可視化的結果反饋。對重點項目進行嚴格的風險管控，開展專項監督、督導活動，逐一進行項目風險識別、風險等級分類、管控措施制定，並開展有效性監督，實施動態風險調整等措施，確保了一系列重點項目的高效、順利執行。2020 年，未發生重大風險事故。

DEC has released a major risk management and control plan, proposing 76 measures for 8 types of risks and 40 risk factors, with dynamic management of major risks on a quarterly basis. The Company has established a risk warning indicator management information system. 15 business indicators such as personnel, finance, operations, R&D, quality, and safety are monitored on a monthly basis, achieving quantitative identification, analysis and visualized result feedback of risks. Strict risk management is carried out targeting key projects, and special supervision campaigns are launched for project risk identification, risk classification, management measures formulation, effectiveness supervision, and dynamic risk adjustment, ensuring the efficiency of key projects. In 2020, no major risk accident occurred.

反腐敗 Anti-corruption

嚴格遵守《中華人民共和國刑法》和其他有關反腐敗、欺詐、洗錢等方面的法律法規，對任何貪污、賄賂、欺詐及洗錢等違反法律、違背職業道德的行為零容忍。報告期內開展反腐倡廉制度建設、舉報及處理程序，落實防控腐敗措施，抓緊抓實黨風廉政建設，治理形式主義官僚主義成效不斷深化。

Strictly abiding by the *Criminal Law of the People's Republic of China* and other laws and regulations related to anti-corruption, fraud, and money laundering, DEC says no to any misconduct of corruption, bribery, fraud, and money laundering against laws and professional ethics. During the reporting period, the Company stepped up efforts to build the anti-corruption system, complete reporting and case handling procedures, and implement measures to prevent and control corruption. With reinforced spirit of integrity, the Company has deepened the effectiveness of the governance against bureaucracy and form over substance.

反腐敗績效 Performances in Anti-corruption

2020 年度，未發現任何因違反賄賂、勒索、欺詐及洗黑錢等方面的法律法規而對東方電氣造成嚴重影響的情況。

In 2020, no case was found when DEC was serious impacted due to violations of laws and regulations such as bribery, extortion, fraud, and money laundering.

2020 年度，提出貪污訴訟案件
In 2020, one corruption lawsuits were filed

1 件

2020 年度，已審結的貪污訴訟案件
In 2020, two corruption lawsuits were closed.

2 件

涉事員工均已被司法機關依法處理。

All the employees involved have been dealt with by the judicial organs according to law.

知識產權保護 IPR Protection

作為國家首批創新型企業、國家技術創新示範企業，東方電氣遵守《反不正當競爭法》等法律法規，以商業秘密保護體系建設工作為抓手，全面研判當前知識產權保護存在的短板和風險，編制公司商業秘密保護系統建設總體方案，訂立管理規範和定密規則，將商業秘密保護與公司現有業務流程充分結合，保護知識產權奠定基礎。

As one of the First National Innovative Enterprises and the National Tech Innovation Demonstration Enterprises, DEC complies with the *Anti-Unfair Competition Law of the People's Republic of China*, and other relevant laws and regulations. Based on the business secret protection system, the Company discusses and decides the current shortcomings and risks in the protection of Intellectual property protection. The overall plan for the construction of the Company's business secret protection system is compiled with management specifications and clear definitions of secrets. Combining the existing business with business secret protection, the system lay the foundation for protecting intellectual property.

2020 年，新增有效專利 370 件，其中發明專利 95 件；參與主持 4 項國家標準制定或修訂，參與 23 項國家標準的制定或修訂，主持 3 項行業標準的制定或修訂，參與 41 項行業標準的制定或修訂。截至 2020 年底，共擁有有效專利 2690 件，其中發明專利 999 件，發明專利占比 37%。

DEC gained 370 new patents in 2020, including 95 invention patents. The Company participated in the initiation of the formulation or amendment of 4 national standards, participated in the formulation or amendment of 23 national standards, initiated or revised 3 industry standards, and participated in the formulation or amendment of 41 industry standards. As of the end of 2020, the Company has possessed 2,690 effective patents, including 999 invention patents, which accounts for 37%.

ESG 管理 ESG Management

東方電氣建立健全公司 ESG 管理機制，重視與利益相關方的溝通，持續完善 ESG 管理制度。

DEC has built a corporate ESG management mechanism, and continuously improves the system based on communications with the stakeholders.

ESG 管理機制 ESG Management System

成立 ESG 工作小組，定期向董事會匯報，協助評估及識別公司于 ESG 層面的風險管理以及其內部監控系統是否合適及有效。工作小組檢討公司的 ESG 表現，包括環境、勞工待遇及涉及 ESG 其他層面信息。董事會為 ESG 策略定下基調，並負責確保合規有效的風險管理制度及內部監控體系運行、系統完整的 ESG 信息披露。

DEC has established an ESG working group to report regularly to the board of directors, assisting in the evaluation and identification of the ESG risk management and the internal control system, ensuring appropriateness and effectiveness. The working group reviews the Company's ESG performance, including information on the environment, labor treatment, and other relevant aspects. The Board of Directors sets the tone for the ESG strategy and is responsible for the compliant and effective risk management system and internal control system, and the systematic and complete ESG information disclosure..

利益相關方溝通 Stakeholder Communication

堅持踐行“共創價值、共享成功”的核心價值觀，高度重視與各利益相關方的溝通交流，通過多種渠道建立常態化溝通機制，不斷優化營運管治、環境保護、員工成長和社區發展各方面措施，為客戶提供更優秀的產品及服務，建設更美好的和諧社會環境。

Upholding value co-creation for a shared prosperity, DEC sets great store by communications with stakeholders. A long-term communication mechanism is established through multiple channels, and measures are improved in terms of operations, management, governance, environmental conservation, employee progress, and community growth. The Company also aims to create a better society with better products and services for the customers.

實質性議題分析 Material Topics Analysis

依托于完善的利益相關方溝通機制，積極開展實質性議題分析，對照香港聯交所《ESG 報告指引》要求，研究國家宏觀經濟政策、國內外社會責任標準要求和公司發展戰略與規劃，識別出應對氣候變化、制造綠色裝備、踐行節能減排、開展合作共贏、助力員工成長、貢獻社區發展等重要議題，作為 ESG 管理重點並在報告中進行披露。

DEC analyzes material topics relying on the complete stakeholder communication mechanism. In accordance with the *ESG Reporting Guide* released by the Stock Exchange of Hong Kong Ltd., the Company has identified important issues of climate change response, green equipment manufacture, energy conservation and emission reduction, win-win cooperation, employee growth, and community contribution, based on the macroeconomic policies of the country, standards and requirements of social responsibilities at home and abroad, and strategies and planning for corporate development.

利益相關方 Stakeholders	期望與要求 Expectations and requirements	溝通渠道 Communication channels
政府 Government	<ul style="list-style-type: none"> 保障依法合規運營 加強環境治理 Guaranteeing legal and compliant operation Strengthening environmental management 	<ul style="list-style-type: none"> 信息披露公告 專題報告 Information disclosure announcement Project reports
投資者 Investors	<ul style="list-style-type: none"> 了解行業形勢、相關政策及經濟影響 建立健全管理機制 開展裝備技術創新 確保產品質量管控 Understanding the industry trend, relevant policies and economic impact Establishing and improving the management mechanism Equipment technology innovation Ensuring product quality control 	<ul style="list-style-type: none"> 股東大會 年報、季報業績說明會 路演活動 諮詢電話 電子郵件 投資者來訪 上證 e 互動 公司專頁 證監局投資者平臺 General meeting of shareholders Annual report and quarterly report performance briefings Roadshow activities Consultation telephone E-mail Investor visits SSE E-interactive platform Company webpage Investor platform of China Securities Regulatory Commission
客戶 Customers	<ul style="list-style-type: none"> 確保產品質量管控 客戶隱私信息保護 提升客戶滿意度 Ensuring product quality control Protecting customer privacy information Improving customer satisfaction 	<ul style="list-style-type: none"> 客戶在綫服務平臺 客戶投訴處理 The online customer service platform Customer complaint handling
供應商 Suppliers	<ul style="list-style-type: none"> 確保產品質量管控 落實環境管理與排放物治理 Ensuring product quality control Implementing environmental management and emission control 	<ul style="list-style-type: none"> 質量巡檢 交流培訓 綫上溝通 Quality inspection Communication and training Online communication
員工 Employees	<ul style="list-style-type: none"> 建立健全權益保障制度 確保員工健康安全 助力員工職業發展 落實員工薪酬福利 Establishing and improving the rights and interests protection system Ensuring the health and safety of employees Helping staff career development Providing compensation and benefits 	<ul style="list-style-type: none"> 員工培訓 員工勞動和技能競賽 員工活動 座談會 廠務公開欄 情況通報會 內部信息網絡 微信公眾號 Staff training Employee labor and skills competition Staff activities Seminars Column on transparency in factory affairs Briefings Internal information network WeChat official account
環境 Environment	<ul style="list-style-type: none"> 完善環境管理體系制度 加強排放物治理 促進資源利用和保護 Improving the environmental management system Enhancing emission control Promoting resource utilization and protection 	<ul style="list-style-type: none"> 信息披露公告 微信公眾號 Information disclosure announcement WeChat official account
社區 Communities	<ul style="list-style-type: none"> 助力脫貧攻堅 開展志願服務 堅持海外履責 Supporting poverty alleviation Volunteer service Fulfilling CSR overseas 	<ul style="list-style-type: none"> 志願服務活動 科普培訓活動 國企開放日 扶貧助學夏令營活動 海外項目走訪 Voluntary services Science popularization training activities SOE Open Day Summer camps for poverty alleviation Overseas project visits

致力能源革命

Committed to the Energy Revolution

東方電氣牢牢把握能源發展趨勢，堅持清潔低碳發展道路，以科技創新推動清潔高效能源產品生產和裝備制造能力升級，引領能源技術革命，推動我國能源行業轉型發展。

Riding the tide of clean and low-carbon energy development, DEC creates clean and efficient energy products and elevates equipment manufacturing capabilities with technological innovation. The Company spearheads technological revolution in energy, driving the industry transition in China.

重大質量事故
No major quality accident

0 起

萬元產值綜合能耗
Comprehensive energy consumption
per RMB 10,000 of operating income
0.0279 TCE/RMB 10,000

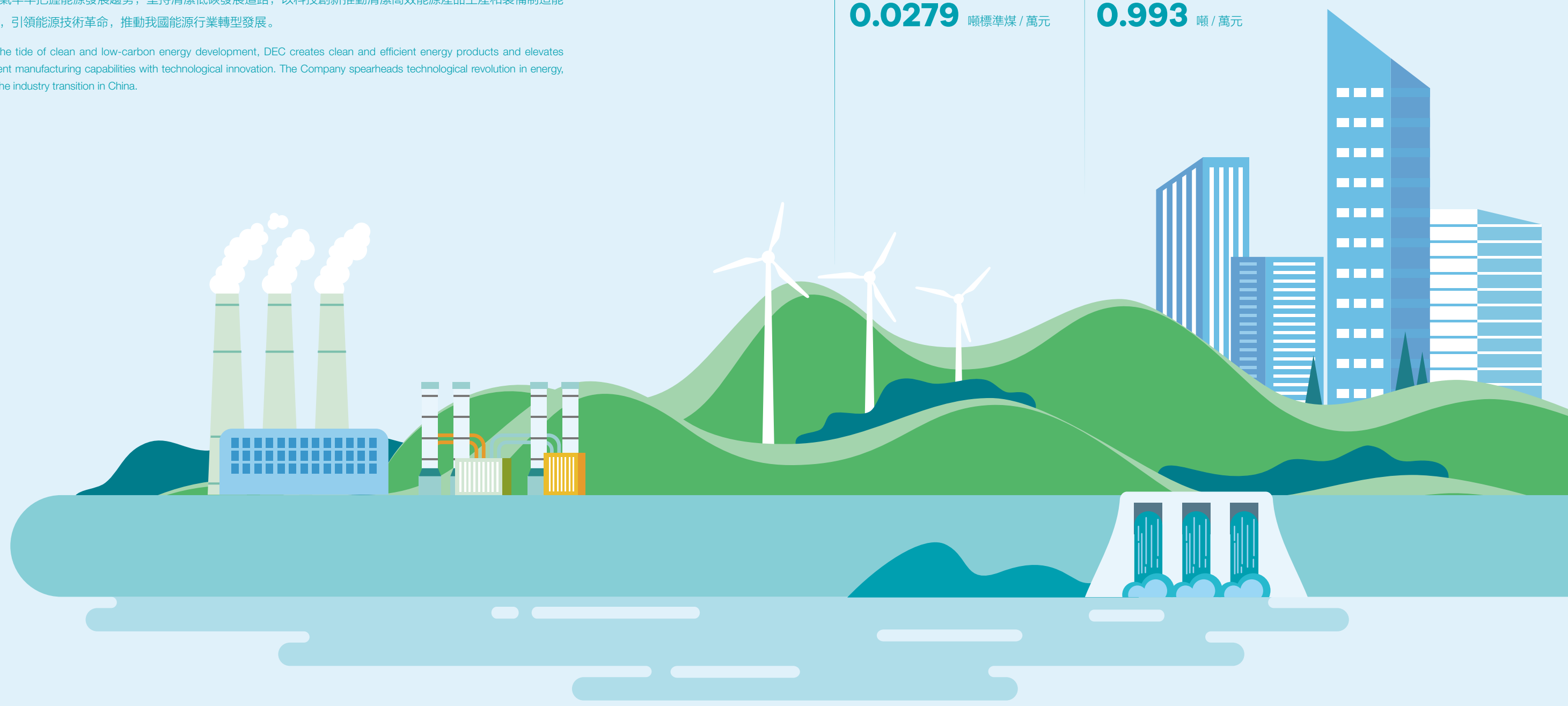
0.0279 噸標準煤 / 萬元

重大客戶投訴
No major customer complaint

0 起

萬元產值水資源消耗
Water resources consumption
per RMB 10,000 of operating
income 0.993 ton/RMB 10,000

0.993 噸 / 萬元



應對氣候變化 Responding to Climate Change

應對氣候變化是全人類共同的事業。2020年9月22日，國家主席習近平在第七十五屆聯合國大會一般性辯論上發表重要講話強調，中國將提高國家自主貢獻力度，採取更加有力的政策和措施，二氧化碳排放力爭於2030年前達到峰值，努力爭取2060年前實現碳中和。

Climate change response is the common cause of all mankind. At the general debate of the 75th session of the United Nations General Assembly, which was convened on September 22, 2020, President Xi Jinping noted that China would scale up the Intended Nationally Determined Contributions by adopting more vigorous policies and measures, peaking the carbon dioxide emissions before 2030 and achieving carbon neutrality before 2060.

作為能源裝備行業領軍者，東方電氣堅決貫徹落實國家重大決策部署，堅定不移走清潔低碳綠色發展道路，認真推動落實“四個革命、一個合作”能源安全新戰略，全力推進能源結構調整和綠色發展，切實踐行綠色發展理念，推動清潔高效能源產品生產，助推能源裝備行業高質量發展，努力為“雙碳”目標實現、為全球應對氣候變化貢獻力量。

As a leader in the energy equipment industry, DEC resolutely implements the major decisions and deployments, unwaveringly follows the path of clean, low-carbon and green development, and earnestly promotes the new energy strategy of “four revolutions and one cooperation (energy consumption revolution, energy supply revolution, energy technology revolution, energy system revolution, and strengthen international cooperation in all aspects to achieve energy security under open conditions)”. The Company promotes the structural adjustment and green development of energy, puts the concept of green development into practice, and creates clean and efficient energy products, boosting the high-quality development of the energy equipment industry and contributing to the accomplishment of the goals about emission peak and carbon neutrality, as well as the global response to climate change.

溫室氣體排放 Greenhouse gas emissions

溫室氣體 GHG	單位 Unit	2020	2019	2018
溫室氣體排放量 GHG emission volume	萬噸 10,000 tons	25.2	26.5	23.3
排放密度 Emission intensity	噸 / 萬元 ton/ RMB 10,000	0.068	0.081	0.076

注：溫室氣體排放量計算參照《機械設備製造企業溫室氣體排放核算方法與報告指南》（試行）相關要求，將化石燃料燃燒排放、淨購入熱力和電力產生的排放等納入統計核算。排放密度 = 溫室氣體排放量 / 營業收入。

Note: Greenhouse gas emissions are calculated according to related requirements in the *Guidelines for Accounting and Reporting Greenhouse Gas Emissions - China Machinery and Equipment Manufacturing Enterprises (Trial)*. Emissions from fossil fuel combustion, net purchased heat and electricity consumed are considered in GHG emissions accounting. Emission intensity = GHG emissions / Revenue.



創造綠色裝備 Green Equipment

東方電氣不斷探索和創新能源利用方式，升級綠色裝備，從強化質量管理、優化客戶服務等方面全方位保障產品安全，承擔產品責任，實現價值共贏。

With continuous explorations and innovations in terms of energy utilization methods, DEC upgrades green equipment and ensures product safety through methods including quality management and customer service improvement, achieving win-win results.

裝備技術 Equipment Technologies

東方電氣潛心鑽研，大力推動綠色裝備新產品的研發，推廣已有產品的市場應用，打造更經濟、更環保的綠色工程，促進清潔能源的全方位發展。

DEC concentrates on research and boosts the all-around development of clean energy by vigorously promoting the R&D of new green equipment products and the market application of existing products, and creating more economical and environmentally friendly projects.

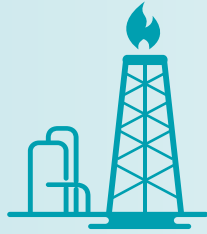
水電 Hydropower

2020年8月18日，東方電氣自主研制的全球首臺百萬千瓦水電機組轉子成功吊裝。白鶴灘水電站是全球單機容量最大、在建規模最大的水電站，裝機總容量1600萬千瓦，東方電氣承擔左岸8臺100萬千瓦機組研制任務。電站建成後，年平均發電量624.43億千瓦時，超過2019年北京市全社會用電總量（1166.4億千瓦時）的二分之一，每年可節約標準煤約1968萬噸，減少排放二氧化碳5160萬噸、二氧化硫17萬噸、氮氧化物約15萬噸，節能減排效益顯著。

On August 18, 2020, the first million-kW rotor of hydroelectric generating set around the globe, researched and developed by DEC, was successfully installed. The Baihetan Hydropower Station, with a total installed capacity of 16 GW, is the world's largest hydropower station that is under construction and has the world's largest single-unit capacity. DEC has undertaken the mission of researching and developing the eight 1 GW generators on the left bank. Upon completion of the project, the average annual power generation will reach 62.443 TWh, which is more than half of the total electricity consumed in Beijing in 2019 (116.64 TWh). The project will drive significant progress in energy conservation and emission reduction, as it saves about 19.68 million tons of standard coal, reduces emissions of carbon dioxide by 51.6 million tons, sulfur dioxide by 170,000 tons, and nitrogen oxide by about 150,000 tons per year.



火電 Thermal power



2020年9月30日，由東方電氣提供三大主機的山西中煤平朔2×660兆瓦低熱值煤熱電新建項目2號機組一次性順利通過168小時滿負荷試運行。整個機組出口二氧化硫的排放小時均值為19.96毫克/標準立方米，鍋爐出口氮氧化物的排放小時均值為28.97毫克/標準立方米，粉塵排放小時均值為0.86毫克/標準立方米，各項污染物排放指標均遠低於超低排放的要求。

On September 30, 2020, the unit 2 of the 2×660 MW thermal power project with low calorific values, whose three major consoles were provided by DEC, successfully passed the first 168-hour full-load trial operation in ChinaCoal Pingshuo Group Co., Ltd. The whole project's sulfur dioxide emissions average 19.96 mg / standard cubic meter every hour, and the boiler emits 28.97 mg / standard cubic meter of nitrogen oxide and 0.86 mg / standard cubic meter of dust per hour on average, all far below the ultra-low requirements for pollutant discharge.

核電 Nuclear power



2020年11月27日，“華龍一號”全球首堆福清核電5號機組首次并網成功。機組各項技術指標均符合設計要求，機組運行狀態良好，標志着中國打破了國外核電技術壟斷，正式進入核電技術先進國家行列。東方電氣是本項目最大的設備供應商。“華龍一號”每臺機組裝機容量116.1萬千瓦，每年發電近100億千瓦時，能夠滿足中等發達國家100萬人口的年度生產和生活用電需求，相當於每年減少標準煤消耗312萬噸，減少二氧化碳排放816萬噸，相當於植樹造林7,000多萬棵。

On November 27, 2020, the world's first "Hualong One" Unit 5 of the Fuqing nuclear power plant was connected to the grid for the first time, with all technological indicators in line with the requirement. The well-performing unit marks that China has broken the monopoly of foreign nuclear power technologies and has officially become one of the advanced countries in this regard. DEC is the largest equipment supplier of this project. "Hualong One" generates nearly 10 TWh of electricity every year with every unit boasting an installed capacity of 1.161 GW, which meets the production and life electricity demands for one million people in middle-sized developed countries. The contribution to energy conservation equals reducing 3.12 million tons of standard coal consumption and 8.16 million tons of carbon dioxide emissions every year, or planting over 70 million trees.

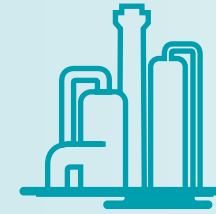
風電 Wind power



2020年7月12日，由東方電氣和中國三峽集團聯合開發的我國首臺10兆瓦海上風電機組在福建興化灣二期海上風電場成功并網發電，刷新了我國海上風電機組單機容量新紀錄。該機組輪轂中心高度距海平面約115米，近40層居民樓的高度，葉輪直徑185米，相當於3臺波音747并排的寬度，風輪掃風面積相當於3.7個標準化足球場。在年平均10米/秒的風速條件下，單臺機組可以輸送出4000萬千瓦時清潔電能，可滿足20,000個三口之家一年的家庭正常用電，可以減少燃煤消耗13,000噸、減少二氧化碳排放35,000噸。

On July 12, 2020, China's first 10 MW offshore wind turbine, co-developed by DEC and China Three Gorges Corporation, was connected to the grid with power generated successfully 12 at Xinghua Bay Wind Farm Phase II of the Fujian province. It has set a new record for the single-unit capacity of China's offshore wind turbines. The center of the hub is about 115 meters above sea level, or nearly 40 floors of residential buildings, to put it in perspective. The diameter of the impeller is 185 meters, equivalent to the width of three Boeing 747s side by side. The sweeping area of the wind turbine is as large as 3.7 standardized football fields. With an average annual wind speed of 10 meters per second, a single unit can deliver 40 million kWh of clean electricity, which can meet the electricity consumption demands of 20,000 three-person households for a whole year. The contribution to energy conservation equals to reducing coal consumption by 13,000 tons and carbon dioxide emissions by 35,000 tons.

氣電 Gas power



2020年11月27日，東方電氣自主研發國內首臺F級50兆瓦重型燃氣輪機實現滿負荷穩定運行。與同等功率的進口燃機相比，整機制造成本可大幅降低，維護成本可降低近50%并實現本土化運維。同時，可顯著降低運輸成本及維修周期，檢修周期可縮短50%以上。

On November 27, 2020, China's First F-Class 50 MW heavy-duty gas turbine, developed by DEC, realized stable operation at full load. Compared with imported gas turbines of the same power, the manufacturing cost of the generator can be greatly reduced, especially the operation and maintenance fee can be cut by 50%. Also, localized operation and maintenance is enabled, which greatly reduces transportation costs and shortens maintenance cycles, the latter by more than 50%.

氫能 Hydroelectricity



2020年1月，東方電氣圓滿交付了成都市第二批90臺示範客車的氫燃料電池發動機系統。截至2020年12月底，投運的100臺氫燃料電池公交車累計行駛超過610萬公里，單車最高運營里程約14萬公里；百公里氫耗低至3.4公斤/百公里，多項系統關鍵指標國內領先。

In January 2020, DEC delivered the hydrogen fuel cell engine systems for the 90 demonstrative passenger cars in the second batch in Chengdu. As of the end of December 2020, the 100 hydrogen fuel cell buses put into use have covered a cumulative distance of over 6.1 million kilometers, with the longest operating mileage of one single bus about 140,000 kilometers. The key indicators of the system, including the hydrogen consumption per 100 kilometers as low as 3.4 kilograms / 100 kilometers, and many key indicators of the system are top-ranked in China.

環保產業 Environmentally friendly industries



由東方電氣自主研發、設計制造的首臺垃圾焚燒餘熱鍋爐機組，于2020年11月3日順利通過72小時試運行考核，實施環保垃圾處理、鍋爐核心設備制造領域的重大突破。試運行期間，鍋爐一直滿負荷穩定運行，燃燒分布均勻，各種工况穩定，排放指標優良，各部件運行狀態平穩，膨脹系統工作正常，實現了高標準、高水平、連續運行的目標。

The first incineration waste heat recovery boiler unit researched, developed, designed and manufactured by DEC successfully completed the 72-hour trial operation on November 3, 2020. It is a major breakthrough in implementation of environmental waste treatment and the manufacturing of core boiler equipment. During the trial operation, the boiler demonstrated consistent stability with a full load. With a uniform distribution of fuel, stable working conditions and performances of every component, excellent emission indexes, and a smoothly-working expansion system, the boiler unit has achieved the goal of continuous operation of high standards and excellence.

質量管控 Quality Control

嚴格遵守《中華人民共和國產品質量法》和業務所在國（地區）質量相關面的法律法規。積極開展質量管理實踐研究和質量管理標準、質量管理方法的創新實踐，依據 ISO9001:2015《質量管理體系要求》，在產品和服務全過程嚴格控制質量，為客戶提供優質產品和服務。2020 年，質量目標全面實現，重大質量事故及重大客戶投訴均為零，質量損失率三年三連降。

In strict accordance with the *Product Quality Law of the People's Republic of China* and the quality-related laws and regulations in countries and regions where the business is based, DEC proactively researches the quality management in practice and innovates in the quality control methods. Based on the *ISO 9001:2015 - Quality management systems — Requirements*, the Company provides customers with high-quality products and services with strict quality control in the whole process. In 2020, the quality goals were fully accomplished, with no major quality accident or major customer complaint, and the quality loss rate dropped for the third consecutive year.

質量文化建設 Quality Culture Establishment

不斷深化“誠信透明、工匠精神、一次做好、追求卓越”的質量文化建設，編制發布《質量文化建設評價標準》，建成全員質量行為規範體系和量化評價體系。2020 年，中央企業全面質量管理知識競賽的參與人數及人員占比再創新高，并再次獲評優秀組織企業，受到國資委通報表揚。

DEC carries forward the establishment of a quality culture that emphasizes honesty and transparency, craftsmanship, one-and-done, and the pursuit of excellence. The Company has compiled and released the *Evaluation Standards for Quality Culture Establishment*, with a system built for standardizing quality control for all, as well as a quantitative evaluation system. In 2020, the number and proportion of DEC participants in the Quality management knowledge competition among central enterprises reached a new high. DEC was again rated as one of the well-organized enterprises, on which the SASAC heaped praise.

強化過程控制 Process Control

堅持“持續改進”的質量理念，并通過每年的內外部審核，不斷提升體系運行有效性。

Striving for continuous quality improvement, DEC elevates the effectiveness of the system through annual internal and external audits.

針對不同產品、不同工序制定嚴格的檢驗標準，覆蓋了從原材料採購、供應商及公司內部製造、現場安裝調試所有過程，確保產品質量滿足客戶要求。

Strict inspection standards are formulated for different products and processes, covering all stages from raw material procurement, suppliers and company internal manufacturing, on-site installation and commissioning, which ensures that the product quality meets customer requirements.

依據《不合格品控制程序》處置過程中出現的問題產品，始終堅持不製造、不傳遞、不接受不合格產品，杜絕問題產品流向客戶，并積極開展群眾性質量改進活動，不斷提升產品質量。

DEC always says no to manufacturing, delivering, or accepting unqualified products. The inferior products are handled according to the *Non-conforming Product Control Procedures*, prevented from going to customers. Quality improvement activities based on the general public are carried out continuously to improve product quality.

開展客戶產品知識培訓、質量經驗反饋、幫助客戶進行問題排查等活動，助力客戶有效進行預防式質量管控，及時消除隱患，提升產品可靠性水平。

Customer training on products, quality experience feedback, and problem check events are held to help the customers conduct preventive quality control, eliminate hidden dangers in time, and improve product reliability.



召開質量講堂
Lectures on quality

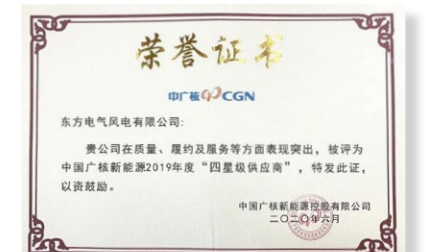


召開質量警示教育會
Quality warning education

客戶服務 Customer Services

始終堅持“24 小時服務精神”，持續優化服務方案，創新服務模式，健全服務支撐系統，及時滿足客戶需求，多措并舉，持續提升客戶滿意度。2020 年 6 月，東方國際被四川省委、四川人民政府授予“四川省優秀服務業企業”稱號；東方風電被中國廣核新能源控股有限公司授予 2019 年度“四星級供應商”稱號，在優質供應商中名列前茅。

Adhering to the spirit of “24h service”, DEC continuously improves service plans by innovating in models, upgrading support systems, and promptly answering customer demands. Multiple measures are taken to improve customer satisfaction. In June 2020, the Orient International (Holding) Co.,Ltd was rated as one of the Outstanding Service Enterprises of Sichuan Province by the Sichuan CPC Provincial Committee and the People's Government of Sichuan Province. Dongfang Electric Wind Power Co.,Ltd was lauded as the Four-Star Supplier 2019 by China General Nuclear Power Corporation.





創新客戶服務模式 Innovating Customer Service Models

優化服務方案，加大燃煤電廠深度調峰改造技術方案準備，組織制定亞臨界 CFB 機組綜合升級改造技術方案、智能化全生命周期服務整體方案；推進客戶服務經理制度的修訂、調整、完善，進一步創新電站服務營銷模式，不斷健全客戶服務經理支撐體系，強化“變被動為主動”的服務理念及服務意識；完善升級客戶在綫服務平臺，持續推進“互聯網+服務”新模式。

DEC optimizes the service plan, and steps up efforts in the technological plan preparation for the deep peak shaving transformation. While formulating the comprehensive upgrade and transformation plan for the subcritical circulating fluidized bed (CFB) units, the Company integrates the overall intelligent plan in the full life cycle service. The customer service manager system is revised, adjusted and improved, with power station service and marketing model revamped. As a result, the Company has successfully improved the customer service manager support system and strengthened the service concept and service awareness of “taking an initiative”. The customer online service platform is upgraded with the new “Internet + service” model promoted.

客戶投訴處理流程 Customer Complaint Handling

建立公司統籌協調、各子企業參與的客戶投訴處置機制，對公司直接受理或子企業上報的投訴事件進行跟踪，協調相關企業及時處理，並定期上報主管領導。

We establish a complaint handling mechanism specially for customers with the Company making the overall plan and all subsidiaries participate in the complaint handling process. Complaints directly reported to the Company or reported by the subsidiaries to the Company are tracked in real time, and related subsidiaries are required to deal with the complaints in time and regularly report to the leader in charge.

客戶信息保護 Customer Information Protection

全面實施客戶資產管理，對客戶及供應商的實物資產和信息資產進行建賬管理，若發生丟失、損壞、變質或其他異常情況，第一時間向客戶或供應商報告。對客戶或供應商的知識產權、商業機密等隱私嚴格按照要求進行保護，防止誤用、濫用、超許可範圍使用或泄露給第三方。

We strictly implement customer asset management and keep meticulous records of the physical and information assets of customers and suppliers. In case of losses, damage, deterioration or other abnormal conditions, we report to the customers or suppliers in the first place. Besides, we firmly protect the intellectual property rights, trade secrets, and other private information of customers and suppliers in line with relevant requirements, and avoid any misuse, abuse, or use beyond the permitted scope of such information by or disclosure of such information to any third party.

踐行節能減排 Energy Conservation and Emission Reduction

東方電氣按照法律法規，切實踐行綠色發展理念，將環境保護、節能減排、循環經濟作為轉型升級和結構調整的重要方向，堅持打造環境友好型、能源節約型企業。

In accordance with laws and regulations, DEC puts the concept of green development into practice. Environmental protection, energy conservation, emission reduction, and circular economy point the way forward for the transformation, upgrading and structural adjustment of the Company, whose aim is to become an environment-friendly and energy-conserving enterprise.

環境管理 Environmental Management

東方電氣嚴格執行環境保護相關法律法規，按照環境管理體系標準要求健全管理制度，識別重要環境因素，完善環境風險控制措施，定期開展環境污染風險排查整治；強化過程監督及問效問責，逐級壓實責任，強化分級管理及目標考核，將能源節約與生態環境保護指標納入經營業績考核。目前持有最新版 GB/T24001-2016/ISO14001:2015 環境管理體系認證證書，並有效運行。

DEC strictly abides by environmental protection laws and regulations. The Company completes the management system in accordance with the environmental management system requirements and guidelines. Important environmental factors are identified to improve the environmental risk control measures. Environmental pollution risk investigation is regularly carried out, followed by remediation. DEC also stresses process supervision, holds people accountable for problems, and emphasizes effectiveness. Responsibilities are sorted level by level, with hierarchical management and target assessment. Indicators of energy conservation and environmental protection are included in the business performance assessment. At present, the Company holds the latest version of GB/T 24001-2016/ISO 14001:2015 environmental management system certification, which is up and running.

排放物治理 Emission Governance

東方電氣嚴格執行《大氣污染防治法》《水污染防治法》《固體廢棄物污染環境防治法》等，制定年度污染物減排措施計劃，並加強監督檢查，將污染物排放指標納入經營業績考核。2020 年，各類污染物達標排放並實現排放總量連續下降，未發生環境保護重大違法違規事件和突發環境事件。

In strict accordance with the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, *Law of the People's Republic of China on the Prevention and Control of Water Pollution*, and *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste*, DEC formulates measure plans for annual pollutant emission reduction. With strengthened supervision and inspection, pollutant emission indicators are incorporated into the business performance assessment. In 2020, all kinds of pollutants met the discharge standards and the total emissions were reduced continuously. No major violations of environmental protection laws and regulations or environmental emergencies occurred.

嚴格執行建設項目環境影響評價制度，落實污染物防治設施“三同時”規定，保證污染防治和其他環境保護設施與主體工程同時設計、同時施工、同時投產使用。

DEC follows the environmental impact assessment system while constructing the projects. Based on related regulations, the Company ensures that pollution prevention and other environmental protection facilities are designed, constructed, and put into operation at the same time as the main project.

加強污染源頭防治，嚴把固定資產投資項目能耗、污染物排放審查關，從源頭上控制污染物的產生和排放。

DEC strengthens the prevention and control of pollutants at the source. Being a gatekeeper of fixed-asset investment projects in terms of energy consumption and pollutant discharge, the Company controls the generation and discharge of pollutants from the very beginning.

開展環境污染風險排查，動態辨識重要環境污染源，排查環境保護風險點，監督落實整改措施及風險防範措施，確保環境污染風險受控。

DEC dynamically identifies important environmental pollution sources with the risk investigations. Risk points are checked, the implementation of rectification measures and risk prevention measures are monitored, to ensure that environmental pollution risks are under control.

強化環保設備運維管理，確保環保設備設施有效運行，各類污染物達標排放。

DEC enhances the operation and maintenance of environmental protection equipment, ensuring the effective operation of environmental protection equipment and facilities, as well as the discharge of various pollutants up to standards.



廢氣排放量
Waste gases

排放物種類 Waste type	單位 Unit	2020	2019	2018
二氧化硫 Sulfur dioxide	噸 ton	196.5	208.4	214
氮氧化物 Nitric oxide	噸 ton	351.4	370.3	401

廢水排放量
Waste water

排放物名稱 Waste type	單位 Unit	2020	2019	2018
氨氮 Ammonia nitrogen	噸 ton	83.5	88.9	94
COD	噸 ton	367.1	381	411.6

危險廢棄物排放量
Solid waste

	單位 Unit	2020	2019	2018
危險廢棄物 Hazardous wastes	噸 ton	2,826	2,995.5	3,583.5
排放密度 *Emission intensity	噸 / 萬元 ton/RMB 10,000	0.00076	0.0009	0.0011

* 排放密度 = 排放量 / 營業收入，意為每一單位營業增長同期的污染排放
* Emission intensity = emission volume/revenue, which refers to the pollutant emissions per unit of business growth over the same period

資源利用和保護
Resource Utilization and Protection

東方電氣重視所有可再生及不可再生資源的利用和保護，按照能源管理體系相關要求，完善能源管理相關制度，監控能源消耗，促進資源節約；加強水資源管理，避免水污染和水浪費；優化包裝，減少包裝對環境的影響，提升資源利用保護效率。

DEC attaches great importance to the utilization and protection of all renewable and non-renewable resources. In accordance with the relevant requirements of the energy management system, the Company improves the energy management systems, monitors energy consumption, and promotes resource conservation. The Company enhances water resources management to avoid water pollution and water waste. Packaging is also optimized to reduce the environmental impact and to improve the efficiency of resource utilization and protection.

能源管理
Energy Management

開展能源消耗和能源利用狀況分析評價，加強重點用能設備及能源計量設施管理，加強能源巡查巡檢及考核；積極從工藝改進、設備節能改造、節能產品推廣等多方面開展節能工作，進一步提升能源利用效率。

DEC analyzes and evaluates energy consumption and utilization, strengthens the management of key energy-consuming equipment and energy metering facilities, and advances energy inspections and assessments. The Company actively carries out energy conservation from various aspects such as process improvement, equipment transformation, and environmental-friendly product promotion to further improve energy efficiency.

水資源節約
Water Conservation

通過保護地下水資源、取水端環境改善、防止過程浪費等措施節約用水，保護水資源，提高用水效益。

DEC elevates water use efficiency and conserves water with measures such as protecting the underground water, improving the environment at the water intake end, and preventing process waste to save water.

包裝減量
Packaging Minimalism

減少不必要的包裝，對於必要包裝優先選取可循環、可降解的環保材料，大量減少塑料材料使用。

DEC reduces unnecessary packaging, and prioritizes recyclable and degradable materials for necessary packaging, greatly cutting the use of plastic materials.

資源消耗情況
Resource consumption

能源消耗 Energy Consumption	單位 Unit	2020	2019	2018
綜合能耗 Ammonia nitrogen Comprehensive energy consumption	噸標準煤 TCE	98,673	102,153	98,200
萬元產值綜合能耗 Comprehensive energy consumption per RMB 10,000 of operating income	噸標準煤 / 萬元 TCE/RMB 10,000	0.0279	0.0349	0.0346
電力 Electricity	萬千瓦時 10,000 kWh	32,783	35,826.5	28,362
天然氣 Natural gas	萬立方米 10,000 m ³	3,809	3,856.1	4,173
汽油 Gasoline	噸 ton	756	805	961.6
水資源消耗 Water consumption	萬噸 10,000 tons	370.3	389.6	426.7
萬元產值水資源消耗 Water resources consumption per RMB 10,000 of operating income	噸 / 萬元 ton/RMB 10,000	0.993	1.1863	1.3896

包裝材料使用
Use of packaging materials

包裝材料 Packaging Materials	單位 Unit	2020	2019	2018
木箱 Wooden box	噸 ton	8,182	4,616	5,449
紙箱 Carton	噸 ton	126	125	122
塑料 Plastic	噸 ton	158	332	283
槽鋼 Steel channel	噸 ton	4,527	3,732	3,627
其他材料 Other materials	噸 ton	514	56	53
包裝材料總計消耗 Total	噸 ton	13,507	8,861	9,534
包裝材料消耗密度 Consumption intensity of packaging materials	噸 / 萬元 ton/RMB 10,000	0.0041	0.0027	0.0031

* 包裝材料消耗密度 = 包裝材料總計消耗重量 / 營業收入
* Consumption intensity of packaging materials = total consumption of packaging material / revenue



空壓系統模組式乾燥機節能技術應用
The application of energy-conserving technologies in air compressed modular dryer



廠房 LED 燈節能產品應用
LED lights in factories with energy-conserving products



關閉地下取水井設施，保護地下水資源
Shutting down underground water intake facilities to protect groundwater resources



自來水管線巡查與洩漏治理工作
Inspection of water pipelines and leakage control

賦能美好生活

Empowering a Better Life

東方電氣始終堅持“動力與溫暖同在、夢想與責任同行”原則，時刻不忘央企義務和社會公民責任，真誠回饋社會，關愛員工成長，支持社區發展，與利益相關方攜手共創美好生活。

DEC invariably adheres to the principle of incorporating warmth into impetus, and dreams into responsibilities. Bearing in mind the obligations as one of the central enterprises and responsibilities as a member of society, the Company gives back to society, cares for employees, and supports community development. Hand in hand with stakeholders, the Company creates a brighter life for all.

員工總數
The total number of employees is 17,336

17,336 人

在定點幫扶地區共投入直接幫扶資金
RMB 27.676 million of direct support funds were invested in the targeted areas

2,767.6 萬元

員工受訓比例
Employee training percentage 95.26%

95.26 %

累計實現脫貧
33,669 people were lifted out of poverty

33,669 人



助力員工成長

Employee Growth

東方電氣重視人才價值，保障員工合法權益，重視員工健康安全，搭建員工成長平臺，制定印發《推進人才工作三年行動方案（2021-2023）》《關於加強科技人才隊伍建設的實施意見》，構建和諧勞動關係，促進企業價值與員工價值共同提升。

DEC attaches great importance to the value of talents, protects the legitimate rights and interests of employees, sets great store by their health and safety, and builds a growth platform for them. The Company has formulated and issued the *Three-year Action Plan for Talent Cultivation (2021-2023) and Implementation Instructions on Strengthening the Cultivation of Scientific and Technological Talents*, with the aim to build a harmonious labor relationship, and to enhance the corporate value and employee value simultaneously.

權益保障

Rights and Interests

嚴格遵守《中華人民共和國勞動法》《中華人民共和國勞動合同法》《中華人民共和國殘疾人保障法》以及相關法律法規的要求，建立健全員工保障制度、薪酬福利體系，與員工建立正規、友好的勞動關係。

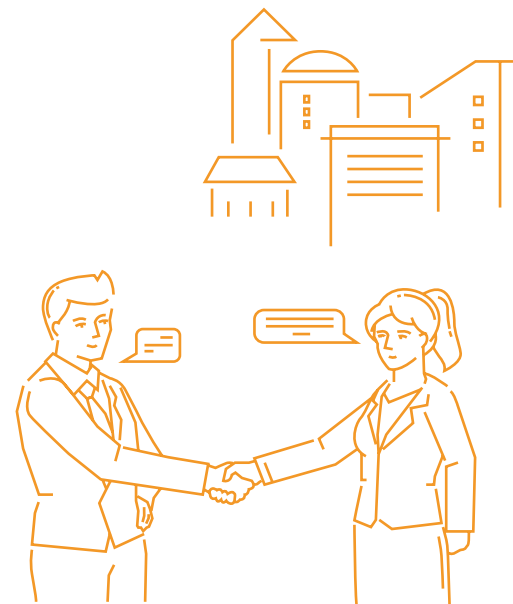
While observing the laws and regulations including the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Law of the People's Republic of China on the Protection of Disabled Persons*, DEC has established a corporate security systems and a remuneration system for employees, keeping the mutual ties formal but friendly.

員工招聘

Recruitment

遵守相關法律法規及公司僱傭制度，通過高端人才招聘、內部招聘、社會招聘、校園招聘等多元化方式引進人才，以公開、公平、公正原則擇優錄取。尊重員工差異，不因種族、性別、年齡、宗教、民族等因素差別對待。在招聘過程中嚴格審查應聘者的身份信息并對相關信息保密，堅決杜絕使用童工和一切形式的強制勞工。報告期內，未出現任何使用童工及強制勞工的情況。

Complying with relevant laws and regulations, as well as the corporate employment system, DEC introduces talents through diversified methods such as high-end talent recruitment, internal recruitment, social recruitment, and campus recruitment. The best candidates are selected based on the principles of openness, fairness and justice. The Company respects the differences among employees and does not discriminate against anyone due to race, gender, age, religion, ethnicity, or other factors. In recruitment, the identity and other information about applicants are strictly reviewed and kept confidential. DEC also says no to the use of child labor or forced labor in all forms. During the reporting period, no use of child labor or forced labor was found.



薪酬福利保障

Remuneration

持續改進績效管理方式，推動落實績效計劃、輔導、考核、面談、應用全流程的績效管理，實現員工績效考核全覆蓋。完善薪酬管理，除法定的“五險一金”外，為員工購買商業補充醫療保險、大額意外傷害保險等；全面實施以崗位為基礎的員工績效管理，建立企業年金，搭建中長期激勵機制、重點項目獎勵機制等薪酬管理體系。為女性員工提供哺育假、產假等相關假期，結合女職工特點和實際情況，組織各分支會開展豐富多彩的紀念“三八節”系列活動，切實保障女性員工專項權益。

The performance management methods are revamped continuously. The entire process includes performance plans, training, appraisal, interviews, and application, and the employee performance appraisals are implemented for all. Salary management is refined. The Company offers the statutory benefits of endowment insurance, medical insurance, unemployment insurance, employment injury insurance, maternity insurance, and housing fund. On top of that, DEC buys commercial supplementary medical insurance and large-scale accident insurance for employees; fully implement job-based employee performance management, sets up corporate annuities. A remuneration management system has been build, which contains a medium and long-term incentive mechanism and a reward mechanism for key projects, among others. The Company provides female employees with nursing leave, maternity leave and other related holidays, and considers the characteristics and actual conditions of female employees while encouraging branches to organize a series of activities to commemorate Women's Day, effectively protecting the special rights and interests of female employees.

民主管理

Democratic Management

深入推進工會勞動保護監督機制，始終將民主管理納入重要議事日程，及時跟踪企業安全生產、職業病防治、工作餐、勞保福利發放等工作跟進，開展監督檢查、滿意度調查和意見徵集，保障員工知情權、參與權、表達權、監督權。

DEC promotes the labor protection and supervision mechanism under the labor union. Democratic management is invariably on the important agenda, with timely follow-up of the supervision and inspection of enterprise work safety, occupational disease prevention, meals, labor insurance and welfare, etc. Satisfaction surveys and opinion pools are also conducted in this regard to ensure employees' right to know, participate, express, and supervise.

建立“三會一公開”的民主管理機制和“目標明確、制度健全、責任落實、措施有力、監督到位”的廠務公開民主管理長效工作機制。

Establishing a democratic management mechanism that requires “three meetings and one disclosure” and a long-term open and democratic working mechanism for factory affairs that requires clear targets, sound system, great accountability, effective measures and adequate supervision.

通過職工代表大會審議通過了涉及職工切身利益的重大問題。

Addressing major issues concerning employee interests in meetings of employee representatives.

通過民主協商、座談會、徵求意見，以及廠務公開欄、情況通報會和內部信息網絡、微信公眾號等形式與員工進行充分溝通交流，有效解決員工利益訴求，回應員工關切。

Improving communications to address employee interest and respond to employee concerns appeals through democratic consultations, discussions and collections of advice and announcing the results in factory affairs bulletin board, briefings, intranet and WeChat official accounts.

雇員人數 (單位: 人)

Total employees (Unit: headcount)

年齡組別 By age group	35歲以下 35 years old and under	36-40歲 36-40 years	41-45歲 41-45 years	46-50歲 46-50 years	50-55歲 50-55 years	55歲以上 51 years old and older	總計 Total
男性 Male	4,979	2,270	2,228	3,095	1,417	344	14,333
女性 Female	1,102	533	683	569	116	0	3,003

僱傭類型 By employment type	技能操作人員 Skilled operators	科技人員 Scientific and technical personnel	經營管理人員 Management personnel	總計 Total
男性 Male	7,038	4,286	3,009	14,333
女性 Female	663	982	1,358	3,003

雇員流失數量 (單位: 人)

Employee turnover (headcount)

年齡組別 By age group	35歲以下 35 years old and under	36-40歲 36-40 years	41-45歲 41-45 years	46-50歲 46-50 years	50-55歲 50-55 years	55歲以上 51 years old and older	總計 Total
男性 Male	111	27	4	4	1	0	147
女性 Female	35	7	1	0	0	0	43

**健康安全
Health and Safety**

牢固樹立“安全第一、生命至上”的安全理念，嚴格落實安全生產責任制，抓緊抓實抓細在全面恢復正常生產經營秩序情況下的疫情防控和安全生產工作。

With the philosophy of "safety first, life supreme", DEC implements the responsibility system of work safety, and goes all out to guarantee epidemic prevention and control, as well as work safety, with the production and operation fully resumed.



**完善責任體系
Responsibility System**

健全安全生產“1+N”制度體系，新制定《安全生產責任追究管理辦法》《安全生產經驗反饋辦法》，形成“層層負責、人人有責、各負其責”的安全生產工作體系。

DEC has completed the "1+N" work safety system, and has formulated the *Work Safety Responsibility Management Measures* and the *Work Safety Experience Feedback Measures* to form a work safety system emphasizing that safety hinges on employees at all levels, is down to every last one of them, and calls for differentiated responsibilities.

**提升職業健康管理
Occupational Health Management**

持續開展職業病危害因素超標點的治理，加強生產現場管理，降低作業環境中職業病危害因素的影響。進一步規範職業健康監護，組織開展上崗前、在崗期間和離崗時的職業健康體檢。

DEC continuously handles the occupational disease hazard factors that do not meet the standards. With strengthened management of production sites, the impact of occupational disease hazards is mitigated in the operating environment. The Company further standardizes occupational health monitoring, organizes and offers employees occupational health examinations before they take the job, during the period of work, and upon their resignation.

**強化安全教育
Safety Education**

落實企業安全生產教育培訓主體責任，通過線上與線下教育相結合的模式，進一步強化生產作業班組的安全培訓，將安全生產宣傳教育作為工前會、班前會的重要內容。

DEC fulfills the responsibility of companies as the main actors in work safety education and training. The safety training of the production team is further strengthened through online and offline education. Work safety publicity and education are now an important part of the pre-production and pre-work meetings.

**加強應急預案
Emergency Plans**

面對突如其來的新冠肺炎疫情，疊加汛情、極寒天氣等極端氣候，健全應急體系，通過多渠道及時傳遞氣象等預警災害信息，定期開展應急演練，進一步提升應急處置能力。

The Covid-19 has caught everyone by surprise, accompanies by extreme weather conditions such as floods and extreme coldness. Against the backdrop, DEC has completed the emergency plans and has promptly transmitted disaster warnings, including bad weather, through multiple channels. Emergency drills are carried out regularly to further improve emergency response capabilities.

較大及以上生產安全事故
0 major or serious work safety accident occurred

0 起

全年組織各類線下安全培訓
17,306 trainees participated in various safety training courses throughout the year

17,306 人次

“五進”活動 安全教育
75,552 attendees were educated in the work safety publicity

75,552 人次

開展各類應急演練
139 emergency drills were organized

139 次

安全生產月活動中線上安全教育
47,886 attendees were educated online in the work safety month

47,886 人次



健康與安全績效

Health and safety performances

指標 Indicators	單位 Unit	2020	2019	2018
因工亡故員工人數 Number of work-related fatalities	人 Number of people	1	0	1
因工亡故員工比率 Rate of work-related fatalities	%	0.0054	0	0.0051
因工損傷工作日數 Lost days due to work injury	人日 Day	6,000	190	7,033

工傷損失工作日參照《企業職工傷亡事故分類標準》(GB 6441)、《事故傷害損失工作日標準》(GB/T 15499)的標準進行統計。

The number of lost workdays due to work-related injury was calculated according to the standards of the Classification for Casualty Accidents of Enterprise Staff and Workers (GB 6441) and the Lost Workdays Standard for Injury Accident (GB/T 15499).

職業發展

Occupational Development

制定實施《公司職業技能等級認定試點工作方案》，建立職業技能評價“1+27”管理制度體系；制定實施《公司職業技能競賽管理規定》，健全職業技能競賽體系，打造高素質專業化人才隊伍。

DEC has formulated and implemented the Occupational Skill Level Certification Pilot Work Plan, establishing a “1+27” occupational skill evaluation management system. The Management Regulations for Company Occupational Skills Competition is also made and followed. While improving the occupational skills competition system, DEC builds a high-quality professional talent pool.



舉辦東方電氣首屆青年職業技能大賽，設置焊工、鉗工、機床裝調維修，計算機網絡管理員 4 個項目（工種），為全公司青年技能提升，職業成長提供了廣闊舞臺。

DEC First Youth Occupational Skills Competition is held. Four projects (types of work) are set up, i.e. welders, fitters, machine tool assembly and maintenance workers, and computer network administrators. The competition provides a broad stage for youth skill improvement and career growth.



舉辦東方電氣首屆青年創新創效大賽，以“青力量·創未來”為主題，圍繞與中心工作密切相關的質量改進、技術創新和降本增效三個方面內容開展

DEC first Innovation and Efficiency Contest is held, with the theme of “Youth Creates the Future”. It is focused on the three aspects of quality improvement, technological innovation, and cost reduction and efficiency enhancement, which are closely related to the center work.



構建職業發展體系

Occupational Development System

構建“橫向可交流、縱向可發展”的職業發展體系，打造“對內可交流、對外可輸送”的事業發展平臺。

DEC has built a career development system that enables employees to communicate horizontally and develop vertically. A career development platform is also established, facilitating internal communications and external exchanges of talents.



加強人才培訓培養機制建設

Talent Training Mechanism

制定《關於進一步加強員工教育培訓工作的意見》，實施全員知識更新工程。組織完成各類領導人員培訓、青年管理骨幹培訓，鉗工、焊工、數控操作工培訓。

DEC has formulated the Instructions on Further Strengthening the Education and Training of Employees, and has implemented a knowledge update project for all. Various training courses for leaders, youths with management potential, fitters, welders, and CNC operators.



開展群眾性技術創新創造活動

Mass Technological Innovation

組織職工開展“五小”成果、建言獻策、技術革新、發明創造等群眾性創新創造活動；充分發揮勞動模範、大國工匠、技能大師等創新工作室的示範引領。2020 年，完成 6 個勞模創新工作室的登記和挂牌，李小軍技能大師工作室被評為國家級技能大師工作室。

DEC organizes mass innovation and creation activities for employees, such as results sharing for the “five smalls (small inventions, small innovations, small transformations, small designs and small suggestions)”, suggestion collections, technological innovations, as well as invention and creation. The Company has given a full play to the demonstrative roles of model workers and innovative studios such as Great National Craftsmen and Skilled Masters. In 2020, the registration and listing of 6 model worker innovation studios were completed, and the Li Xiaojun Skilled Master Studio was rated as a national-level skilled master studio.



組織勞動和技能競賽

Labor and Skill Competitions

深入開展崗位練兵、技術比武、導師帶徒等活動，積極組織員工參加各類大賽，充分調動員工學業務、創一流的積極性。2020 年，舉辦“東方電氣首屆青年職業技能大賽”。

DEC organizes on-the-job training, technical competitions, apprenticeships and other activities, and encourages employees to engage in various competitions. The employees are fully mobilized to learn business with down-to-earth attitudes and strive for excellence. In 2020, DEC held the First Youth Occupational Skills Competition.



聯合資源開展合作辦學

Training Organization in Concerted Efforts

與中央黨校、延安幹部學院、井岡山幹部學院、清華大學、上海 GE 克勞頓學院合作舉辦專題培訓班，提升學習培訓效果。

To improve the effects of learning and training, DEC organizes special training courses in cooperation with the Party School of the Central Committee of CPC, China Executive Leadership Academy, Yan'an, China Executive Leadership Academy, Jinggangshan, Tsinghua University, and GE Crotonville in Shanghai.



舉辦“清華大學東方電氣首屆青年科技拔尖人才企業創新發展專題培訓班”

The first THU & DEC Special Training Course on Corporate Innovation and Development of the Top Young Sci-tech Talents



上線東方電氣學習雲平臺

DEC cloud learning platform is held

員工受訓百分比 Employee training percentage

性別 By Gender	技能操作人員 Skilled operators	科技人員 Scientific and technical personnel	經營管理人員 Management personnel	總計 Total
受訓百分比 Employee training percentage	96.94%	89.60%	99.13%	95.26%
男性 Male	6838	3866	2987	13691
女性 Female	627	854	1342	2823

平均培訓時數 (小時) Average training hours (Unit: hour)

		類別 Type	2020	2019
性別 By gender	男性 Male		67.03	66.81
	女性 Female		69.86	68.05
雇員類型 By employment category	技能操作人員 Skilled operators		64.08	62.95
	科技人員 Scientific and technical personnel		67.67	66.98
	經營管理人員 Management personnel		70.14	69.48

員工關懷 Employee Care

堅持做好員工普惠工作，持續開展員工生日、生病住院等日常慰問和夏送清涼、冬送溫暖活動。開展困難員工精準幫扶，推進員工重大疾病救助互助工作，幫助慰問因重大疾病或重大意外致困員工家庭；持續開展金秋助學活動，使廣大員工真正體驗到大家庭的溫暖，增強員工凝聚力、向心力。

DEC aims to bring benefits to all employees. The care is reflected by greetings sent on employees' birthdays or when they are hospitalized. It is also manifested by the Company's efforts to improve their living conditions in hotness and coldness. The Company provides targeted assistance for employees in need, and offers relief and help to those with major illnesses. Care is shown promptly to the families of the employees that are impoverished because of major diseases or accidents. The Company also continuously helps with education. These efforts have brought employees warmth and love, increasing team cohesion.



2020年10月19日，東方電氣總部直屬團委組織20餘名青年參加“相約金秋 最美遇見”主題青年交友聯誼活動。

On October 19, 2020, the Youth League Committee directly under the DEC headquarter organized a social event for over 20 young people to make friends, under the theme of "Meeting in the Beautiful Autumn"



2020年7月17日，東方研究院舉辦了“與壓力共處，與情緒共舞”心理學專題講座。

On July 17, 2020, the Dongfang Research Institute held a psychology lecture on "Live with Stress and Dance with Emotions"



2020年5月21日，東方自控舉辦了“你若盛開，蝴蝶自來——壓力及情緒管理講座”職工心理健康培訓。

On May 21, 2020, Dongfang Electric Autocontrol Engineering Co.,Ltd held the mental health training for employees, themed under "Butterflies Will Come for a Fully-Blossoming Flower: Stress and Emotion management"

推進合作共贏 Win-win Cooperation

供應鏈管理 Supply Chain Management

東方電氣高度重視與供應商的關係，通過完善管理制度、優化供應商業績評價體系、加強供應商培養等方式與優秀供應商建立長期良好戰略合作關係。報告期內，與本公司有合作關係的合格供應商近九千家。其中，境內供應商（含中外合資）8千餘家，境外供應商（含外商獨資企業）800餘家。

DEC attaches great importance to the relationship with suppliers. Long-term strategic partnerships with good suppliers are established by improving management systems, improving supplier performance evaluation systems, strengthening supplier training, etc. During the reporting period, the Company has cooperated with nearly 9,000 qualified suppliers. Among them, there are 8,000 domestic suppliers (including Sino-foreign equity joint ventures) and over 800 overseas suppliers (including wholly foreign-owned enterprises).

完善管理制度

Improving the management system

按照公司現代供應鏈管理理念，助力構建優質供應鏈管理體系，制定并發布《供應商管理辦法》《總部供應商管理細則》《集中採購供應商管理細則》《供應商黑名單管理細則》等四項管理制度，推進供應商管理由競爭關係模式向雙贏關係模式的轉變。

In accordance with the modern supply chain management philosophy of DEC, the Company has built a high-quality supply chain management system, with four management systems formulated and published, i.e. *Supplier Management Measures*, *Headquarters Supplier Management Rules*, *Centralized Procurement Supplier Management Rules*, and *Supplier Blacklist Management Rules*. The relationship with suppliers is being transformed from a competitive one to a win-win one.

建立激勵機制

Establishing an incentive mechanism

明確供應商的準入、淘汰機制，與合格供應商簽訂廉潔自律等協議。全方位、全周期關注採購質量，并實行供應商動態業績評價和分級分類管理，對評價結果優秀的供應商在同等情況下建立長期、穩定的合作伙伴關係，對有違規違紀行為和重大質量問題的供應商納入黑名單。

We set clear criteria for supplier entry and exit, and sign agreements, such as the integrity and self-discipline agreement, with qualified suppliers. In addition, we guarantee high-quality procurement throughout the process, carry out dynamic assessment of supplier performance, and implement hierarchical and classified management of suppliers. We establish long-term, stable partnerships with suppliers with excellent assessment results and blacklist suppliers who have violated regulations and disciplines or found with quality problems.

打造信息化供應鏈

Building an information supply chain

積極投入供應鏈信息化建設，打造精益化、智能化供應鏈。進一步優化基于全信息流、供應商協同模塊、智能倉儲系統的供應鏈信息系統，并逐步推進信息化建設。

DEC actively invests in the information technology of the supply chain in a bid to create a lean and intelligent supply chain. DEC optimized the supply chain information system, based on the information flow, supplier collaboration modules, and the intelligent warehousing system, gradually promoting the information technology.

推進產業鏈合作

Promoting industry chain cooperation

利用自身原材料儲備優勢、集團化集中採購優勢和自有運輸能力，積極提供原材料及下料、加工等服務，解決疫情期間物流效率下降，部分產業鏈企業原材料供應不足問題，有效促進了產能迅速恢復和經營發展的良好開局。

DEC makes full use of advantages in terms of the raw material reserve, group centralized procurement and transportation capabilities to actively provide raw materials, and services including blanking and processing. As a result, problems during the Covid-19 are effectively solved, such as the decline in logistics efficiency and the insufficient supply of raw materials from some industry chain enterprises, which has laid ahead of us a good start of rapid recovery of production capacity and business development.

開展供應商培訓

Organizing supplier training

開展供應商交流培訓，并以關鍵供應商、問題供應商為重點，開展對供應商的質量幫扶和質量監督；針對重點項目，開展供應商專項指導，穩步提升供應商供貨能力，實現優勢互補、合作共贏。

DEC conducts supplier exchange training, and carries out supplier quality assistance and supervision with a focus on key suppliers and problem suppliers. Experts are dispatched to provide guidance for suppliers of some products in major projects, aiming to steadily improve their supply capabilities, complementing each other's advantages and achieving win-win cooperation.



東方電氣採購與供應商管理制度培訓交流會

DEC procurement and supplier management system training and exchange conference

戰略合作 Strategic Cooperation

與上海核工院、華為等簽署戰略合作協議，充分發揮伙伴優勢，整合產業鏈上下游資源，在能源項目、新材料、節能環保、現代制造服務業等領域進一步拓展合作空間，強化戰略對接，推動合作雙方實現高質量發展。

DEC signed the strategic cooperation contracts with Shanghai Nuclear Engineering Research & Design Institute Co.,Ltd and Huawei. Giving full play to the partnerships, the Company integrates the upstream and downstream resources of the industry chain and expands cooperation in terms of energy projects, new materials, energy conservation and environmental protection, modern manufacturing services, etc. High-quality development is achieved on both sides with better strategic docking.



貢獻社區發展

Devotion to Community Development

東方電氣展現大企業擔當，積極開展脫貧攻堅、志願服務、社區參與、海外履責系列活動，為和諧社會建設貢獻力量。

Demonstrating its responsibility as a large enterprise, DEC actively contributes to poverty alleviation, voluntary services, community engagement, and overseas CSR fulfillment, playing our role in the construction of a harmonious society.

脫貧攻堅 Poverty alleviation

堅持把定點扶貧作為最大的責任，以高度的責任感和使命感，以精準扶貧為重點，結合定點扶貧縣實際情況與公司行業、資源優勢，緊扣“兩不愁三保障”目標，持續深化“五位一體”脫貧攻堅機制，落實“百千萬億”脫貧攻堅工程，扎實推進產業扶貧、教育扶貧、民生扶貧、就業扶貧、黨建扶貧五大幫扶舉措落實落地，全力支持定點幫扶地區和貧困群眾打贏脫貧攻堅戰。

DEC regards fixed-point poverty alleviation as the greatest responsibility. With a great sense of responsibility, the Company focuses on targeted poverty alleviation, and deepens the “five-in-one” poverty reduction mechanism based on the realities of designated counties and our industry and resource advantages. In pursuit of the goal of “two assurances and three guarantees”, we have implemented the poverty alleviation project for all, boosting the cause through five major measures of industry support, education poverty, livelihood improvement, employment, and party building, fully supporting the targeted regions and the poor in the battle against poverty.



產業扶貧 Industrial support

以“地方政府 + 鄉村集體合作社 + 幫扶企業 + 龍頭企業”模式，兩端發力、推拉結合，因地制宜發展產業，助力當地脫貧摘帽。

With the model of “local government + rural cooperatives + supported enterprises + leading enterprises”, efforts are exerted by more than one actor, and industries get developed based on local conditions, facilitating poverty reduction.

教育扶貧 Education

捐建標準化幼教點，對小學、中學進行升級改造，有效改善貧困鄉村學前教育環境，助力“學前學普”行動。

DEC supports the construction of standardized preschool education centers with donations and upgrades and transforms primary and middle schools, effectively improving the preschool education in poor villages and fueling the campaign of “preschool mandarin education”.

民生扶貧 Livelihood improvement

從改善生產、生活基礎條件入手，改建連片土坯房，實施鄉村照明工程，為貧困戶實施廚衛改造、購置客廳三件套，有效改善家居條件。

Aiming to improve the basic conditions of production and living, DEC has effectively bettered the living conditions for the poor while rebuilding blocks of adobe houses, implementing rural lighting projects, renovating kitchens and bathrooms for the poor, and purchasing necessary pieces of furniture and household appliances for the poor.

就業扶貧 Employment

結合當地實際和市場需要，大力開展職業技能培訓和種養技術培訓，拓寬當地群眾就業的門路。通過社會招聘和校園招聘吸收了貧困大學生和青年到公司所屬企業就業，多方面促進就業扶貧。

Based on the local conditions and the market needs, DEC has vigorously developed vocational skills training and technology training on planting and breeding, diversifying the opportunities for local people to find jobs. Through social recruitment and campus recruitment, companies under DEC have provided positions for many impoverished college students and young people, promoting employment-driven poverty alleviation in many aspects.

黨建扶貧 Party building

堅持把黨建扶貧作為引領、助力脫貧攻堅的核心要義。做實結對共建、觀念轉變、人才培訓、結對幫扶等工作，不斷增強農村基層黨建力度，充分激發脫貧內生動力。

Party building is consistently regarded as the core principle of leading and helping poverty alleviation. We will continue to strengthen the efforts of rural primary-level party building, and fully unleash the endogenous motivation for poverty alleviation.



志願服務 Voluntary Services

組織青年志願者參加文明城市創建志願服務、垃圾分類、回收廢舊電池等活動，依托“學雷鋒—青年志願者便民服務活動”等傳統活動平臺，推動志願服務項目化運行、常態化發展，着力打造具有廣泛影響力的特色品牌項目，展現中央企業青年職工的社會擔當。

DEC mobilizes young volunteers to go to voluntary services for building civilized cities, waste sorting, and recycling of used batteries, etc. Relying on traditional platforms including “Learning from Lei Feng—Services of Young Volunteers for the People”, the Company facilitates the operation of such activities in the form of projects, and boosts their normalized development, DEC demonstrates the social responsibility of young employees of central enterprises with featured brand projects, bringing wide-ranging influence.

共組織志願活動

65 voluntary activities were organized

65 次

共投入志願服務費用

RMB 67,400 was invested in voluntary services

6.74 萬元

共組織社區開放活動

23 community open activities were held

23 次

組織無償獻血 Unpaid blood donation

始終堅持開展社會公益活動，高度重視無償獻血工作，各單位、各部門精心組織，廣大員工積極響應，奉獻愛心。

Consistently holding charitable events, DEC attaches great importance to unpaid blood donation. All units and departments have meticulously organized the events while the majority of employees welcomed them and contributed their strength.

助力城市宣傳 Urban publicity

開展創建全國衛生城市宣傳、全國文明城市宣傳、疫情防控宣傳和環境衛生治理等志願服務活動，共計 15 次，150 餘人次參與。

Voluntary service activities are carried out, such as publicizing the establishment of national sanitary cities, national civilized cities, epidemic prevention and control, and sanitation management. Over 150 participants have engaged in a total of 15 publicity activities.

開展舊衣捐贈 Old clothes donation

指導志願者協會開展了“衣舊有愛 情暖秋冬”舊衣捐贈活動，共捐贈衣物 574 件。

The Volunteer Association, under the guidance of the Company, organized the old clothes donation of “old clothes contain love and warmth covers autumn and winter”, donated 574 pieces of clothes.

社區參與 Community Engagement

積極組織參與社區開放活動，在社區開展核電科普、組織國企開放日、夢想起航夏令營等，加強社區對企業的了解，在溝通中促進同社區的融合發展。

DEC deepens community understanding of the Company and facilitates community integrated development in communications by actively initiating or engaging in community open activities, carrying out nuclear power science popularization in the community, creating SOE “Open Day” activities, and organizing “Dreams Sail” summer camps, etc.



東方重機面向粵港澳大灣區中學生開展核電科普活動，共組織研學團全體師生近 480 人次赴公司進行研學參觀

Dongfang Electric Dongfang (Guangzhou) Heavy Machinery Co.,Ltd organizes nuclear power science popularization, and all faculty members and students (nearly 480 people) from the research group come to the company to observe.



夢想起航夏令營

The “Dreams Sail” summer camp



東方汽輪機組織和開展國企開放日，加深企業與社會溝通和聯結

Dongfang Turbine organizes the SOE Open Day to strengthen the connection between DEC and society.

海外履責 CSR Practices Overseas

積極搭建中外友好合作關係，提供優質裝備，助建品質工程，服務當地能源供應，帶動當地產業發展的同時促進就業。

DEC contributes in the friendly cooperative relations between China and the rest of the world. By providing high-quality equipment, helping to build quality projects, and supplying local energy, the Company promotes the development of local industries while boosting employment.

促進當地就業 Local Employment

巴布亞新幾內亞 -- 羅納項目組針對當地村民文化素質不高，技能能力較弱的問題，安排專人對當地工人進行安全、技能教育培訓，“授人以魚不如授人以漁”，在解決當地村民就業的同時，提高了其職業技能。

The Rouna project team in the Independent State of Papua New Guinea provides safety and skills education and training for local workers in response to local villagers' limited literacy and weak technical abilities with special personnel. Believing that "teaching people how to fish outweighs giving them fish", DEC improves the vocational skills of villagers while getting them jobs.



支持社區發展 Community Development

聯系巴布亞新幾內亞衛生組織健康中心的醫務人員，定期走訪項目所在地附近村落，為村民發放艾滋病防護用品，宣傳引導當地村民做好預防工作。維修 Sirinumu 項目部分地段，解決當地居民的出行難題。

DEC contacts the medical staff of the Health Center of the Health Organization of Papua New Guinea. AIDS protection supplies are given away to the villagers, and publicity on disease prevention is carried out, during the regular visits to nearby villages. Transportation is improved where the Sirinumu project is located, through maintenance.



共克時艱 Tiding over Difficulties

主動向海外合作伙伴了解疫情防控有關情況，並提供力所能及的幫助。通過多方努力，籌集防疫物資，累計向 31 個國家的 60 個合作伙伴援助了逾 20 萬只各類醫用口罩以及測溫槍、防護服、護目鏡等物資。

DEC proactively learns about the epidemic prevention and control from overseas partners, and provides assistance within our capacity. Through various efforts to raise epidemic prevention materials, a total of more than 200,000 medical masks, thermometers, protective clothing, goggles and other materials have been sent to 60 partners in 31 countries.



附錄：香港交易所《環境、社會及管治報告指引》 HKEx Environmental, Social and Governance Reporting Guide

範疇與層面 Subject Areas and Aspects	一般披露及關鍵績效指標 General Disclosures and KPIs	披露頁碼 Page(s)	
A 環境 Environ- mental	A1: 排放物 Emissions	一般披露：有關廢氣及溫室氣體排放、向水及土地的排污、有害及無害廢棄物的產生等的政策及遵守對發行人有重大影響的相關法律及規例的資料。 General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	P24-26
	A1.1	A1.1 排放物種類及相關排放數據。 KPI A1.1: The types of emissions and respective emissions data.	P24-26
	A1.2	A1.2 直接（範圍 1）及能源間接（範圍 2）溫室氣體排放量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）。 KPI A1.2: Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P17
	A1.3	A1.3 所產生有害廢棄物總量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）。 KPI A1.3: Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P24-26
	A1.4	A1.4 所產生無害廢棄物總量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）。 KPI A1.4: Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P24-26
	A1.5	A1.5 描述所訂立的排放量目標及為達到這些目標所採取的步驟。 KPI A1.5: Description of emission target(s) set and steps taken to achieve them.	P24-26
	A1.6	A1.6 描述處理有害及無害廢棄物的方法，及描述所訂立的減廢目標及為達到這些目標所採取的步驟。 KPI A1.6: Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	P24-26
	A2: 資源使用 Use of Resources	一般披露：有效使用資源（包括能源，水及其他原材料）的政策。 General Disclosure: Policies on the efficient use of resources, including energy, water and other raw materials.	P26-28
	A2.1	A2.1 按類型劃分的直接及 / 或間接能源（如電、氣或油）總耗量（以千個千瓦時計算）及密度（如以每產量單位、每項設施計算）。 KPI A2.1: Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	P26-28
	A2.2	A2.2 總耗水量及密度（如以每產量單位、每項設施計算）。 KPI A2.2: Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P26-28
	A2.3	A2.3 描述所訂立的能源使用效益目標及為達到這些目標所採取的步驟。 KPI A2.3: Description of energy use efficiency target(s) set and steps taken to achieve them.	P26-28
	A2.4	A2.4 描述求取適用水源上可有任何問題，以及所訂立的用水效益目標及為達到這些目標所採取的步驟。 KPI A2.4: Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	P26-28
	A2.5	A2.5 制成品所用包裝材料的總量（以噸計算）及（如適用）每生產單位佔量。 KPI A2.5: Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	P26-28
	A3: 環境及天然資源 The Environment and Natural Resources	一般披露：減低發行人對環境及天然資源造成重大影響的政策。 General Disclosure: Policies on minimising the issuer's significant impacts on the environment and natural resources.	P24
	A3.1	A3.1 描述業務活動對環境及天然資源的重大影響及已採取管理有關影響的行動。 KPI A3.1: Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P24

範疇與層面 Subject Areas and Aspects	一般披露及關鍵績效指標 General Disclosures and KPIs	披露頁碼 Page(s)
A 環境 Environ-mental	A4: 氣候轉變 Climate Change 一般披露: 識別及應對已經及可能會對發行人產生影響的重大氣候相關事宜的政策。 General Disclosure: Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P17
	A4.1 A4.1 描述已經及可能會對發行人產生影響的重大氣候相關事宜, 及應對行動。 KPI A4.1: Description of the significant climate-related issues which have impacted, and those which may impact the issuer, and the actions taken to manage them.	P17
B. 社會 Social	B1: 僱傭 Employment 一般披露: 有關薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇及福利的政策及遵守對發行人有重大影響的相關法律及規例的資料。 General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	P31-32
	B1.1 B1.1 按性別、僱傭類型(如全職或兼職)、年齡組別及地區劃分的僱員總數。 KPI B1.1: Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	P33
	B1.2 B1.2 按性別、年齡組別及地區劃分的僱員流失比率。 KPI B1.2: Employee turnover rate by gender, age group and geographical region.	P33
	B2: 健康與安全 Health and Safety 一般披露: 披露有關提供安全工作環境及保障僱員避免職業性危害的政策及遵守對發行人有重大影響的相關法律及規例的資料。 General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	P34
	B2.1 B2.1 過去三年(包括匯報年度)每年因工亡故的人數及比率。 KPI B2.1: Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P35
	B2.2 B2.2 因工傷損失工作日數。 KPI B2.2: Lost days due to work injury.	P35
	B2.3 B2.3 描述所採納的職業健康與安全措施, 以及相關執行及監察方法。 KPI B2.3: Description of occupational health and safety measures adopted, how they are implemented and monitored.	P34
	B3: 發展與培訓 Development and Training 一般披露: 有關提升僱員履行工作職責的知識及技能的政策。描述培訓活動。 General Disclosure: Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	P35-36
	B3.1 B3.1 按性別及僱員類別(如高級管理層、中級管理層等)劃分的受訓僱員百分比。 KPI B3.1: The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P37
	B3.2 B3.2 按性別及僱員類別劃分, 每名僱員完成受訓的平均時數。 KPI B3.2: The average training hours completed per employee by gender and employee category.	P37
	B4: 勞工準則 Labor Standards 一般披露: 有關防止童工或強制勞工政策及遵守對發行人有重大影響的相關法律及規例的資料。 General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labor.	P31
	B4.1 B4.1 描述檢討招聘慣例的措施以避免童工及強制勞工。 KPI B4.1: Description of measures to review employment practices to avoid child and forced labor.	P31
	B4.1 B4.1 描述檢討招聘慣例的措施以避免童工及強制勞工。 KPI B4.1: Description of measures to review employment practices to avoid child and forced labor.	P31
	B4.2 B4.2 描述在發現違規情況時消除有關情況所採取的步驟。 KPI B4.2: Description of steps taken to eliminate such practices when discovered.	P34
	B5: 供應鏈管理 Supply Chain Management 一般披露: 管理供應鏈的環境及社會風險政策。 General Disclosure: Policies on managing environmental and social risks of the supply chain.	P39

範疇與層面 Subject Areas and Aspects	一般披露及關鍵績效指標 General Disclosures and KPIs	披露頁碼 Page(s)
B. 社會 Social	B5.1 B5.1 按地區劃分的供應商數目。 KPI B5.1: Number of suppliers by geographical region.	--
	B5.2 B5.2 描述有關聘用供應商的慣例, 向其執行有關慣例的供應商數目、以及有關慣例的執行及監察方法。 KPI B5.2: Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	P39
	B5.3 B5.3 描述有關識別供應鏈每個環節的環境及社會風險的慣例, 以及相關執行及監察方法。 KPI B5.3: Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P39
	B5.4 B5.4 描述在揀選供應商時促使多用環境產品服務的慣例, 以及相關執行及監察方法。 KPI B5.4: Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P39
	B6: 產品責任 Product Responsibility 一般披露: 有關所提供產品和服務的健康與安全、廣告、標籤及私隱事宜以及補救方法的政策及遵守對發行人有重大影響的相關法律及規例的資料。 General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	P21
	B6.1 B6.1 已售或已運送產品總數中因安全健康理由而須回收的百分比。 KPI B6.1: Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P16
	B6.2 B6.2 接獲關於產品及服務的投訴數目以及應對方法。 KPI B6.2: Number of products and service related complaints received and how they are dealt with.	P16
	B6.3 B6.3 描述與維護及保障知識產權有關的慣例。 KPI B6.3: Description of practices relating to observing and protecting intellectual property rights.	P23
	B6.4 B6.4 描述質量檢定過程及產品回收程序。 KPI B6.4: Description of quality assurance process and recall procedures.	P21
	B6.5 B6.5 描述消費者資料保障及私隱政策, 以及相關執行及監察方法。 KPI B6.5: Description of consumer data protection and privacy policies, and how they are implemented and monitored.	P23
	層面 B7: 反貪污 Anti-corruption 一般披露: 有關防止賄賂、勒索、欺詐及洗黑錢的政策及遵守對發行人有重大影響的相關法律及規例的資料。 General Disclosure: Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	P11-12
	B7.1 B7.1 于匯報期內對發行人或其僱員提出并已審結的貪污訴訟案件的數目及訴訟結果。 KPI B7.1: Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P12
	B7.2 B7.2 描述防範措施及舉報程序, 以及相關執行及監察方法。 KPI B7.2: Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P12
	B7.3 B7.3 描述向董事及員工提供的反貪污培訓。 KPI B7.3: Description of anti-corruption training provided to directors and staff.	--
	B8: 社區投資 Community Investment 一般披露: 有關社區參與來了解營運所在社區需要和確保其業務活動會考慮社區利益的政策。 General Disclosure: Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	P41
B8.1 B8.1 專注貢獻範疇(如教育、環境事宜、勞工需求、健康、文化、體育)。 KPI B8.1: Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).	P41-45	
B8.2 B8.2 在專注範疇所動用資源(如金錢或時間)。 KPI B8.2: Resources contributed (e.g. money or time) to the focus area.	P41-45	

讀者反饋表

尊敬的讀者：

您好！感謝您閱讀《東方電氣 2020 年環境、社會及管治報告》。我們非常重視并期望聆聽您對東方電氣環境、社會及管治報告的反饋意見。您的意見和建議，是我們持續推進企業社會責任管理和實踐的重要依據。您可以復制、填寫、裁剪下表，通過郵件、傳真反饋給我們，我們非常歡迎并由衷感謝您提出寶貴意見！

選擇題（請在相應的位置打“√”）

1. 您認為本報告是否能反映東方電氣對經濟、社會和環境的重大影響？

是 一般 否

2. 您認為本報告識別出的利益相關方及其與東方電氣關係的分析是否準確、全面？

是 一般 否

3. 您認為本報告披露的信息是否全面？

是 一般 否

4. 您認為本報告披露的信息是否具有可讀性？

是 一般 否

開放性問題

1. 您認為還有哪些您關注的信息未在本報告中披露？

2. 您認為本報告還有哪些可以改進的地方？

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Feedback Form

Dear Readers:

Thank you for reading our Environmental, Social and Governance (2020) Report. We highly value and are looking forward to receiving your feedback on our ESG report. Your suggestions and comments are valuable basis for us to continue to improve our quality of information disclosure on corporate social responsibility and to promote our corporate social responsibility management and practices. You can copy, fill in and cut out the following form, and feed back to us by email or fax. We sincerely thank you for your valuable comments!

Choice questions (Please tick the corresponding option)

1. Do you think this report can reflect the significant impact of DEC on economy, society and environment?

Yes Fair No

2. Do you think the analysis of the stakeholders identified in this report and their relationship with DEC is accurate and comprehensive?

Yes Fair No

3. Do you think the information disclosed in this report is comprehensive?

Yes Fair No

4. Do you think the information disclosed in this report is readable?

Yes Fair No

Open questions

1. What other information do you think you are concerned about are not disclosed in this report?

2. What else do you think can be improved in this report?

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