

(Incorporated in the Cayman Islands with limited liability) (於開曼群島註冊成立的有限公司) Stock Code 股份代號:00968



及管治報告

LEADING GREEN NEW ENERGY XINYI SOLAR

信義光能 引領綠色新能源

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GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

「信」重英才,完善人才管理

ABOUT THIS REPORT 關於本報告

關於我們

This Environmental, Social and Governance ("ESG") Report (the 本報告乃信義光能控股有限公司(「信義 "**Report**") is prepared in accordance with the Environmental, Social and Governance Reporting Guide (the "ESG Reporting Guide"), Appendix 27 to the Rules Governing the Listing of 公司(「香港聯交所」)的證券上市規則附 Securities of the Stock Exchange of Hong Kong Limited (the 錄二十七《環境、社會及管治報告指引》) "Hong Kong Stock Exchange") by Xinyi Solar Holdings (「ESG報告指引」)編寫的《環境、社會及 Limited ("Xinyi Solar" or the "Company") and its subsidiaries (the "Group").

This report is the fourth annual ESG report of Xinvi Solar. 本報告為信義光能的第四份ESG年度報 With the theme of "Adhering ('Xin'shou) to Our Original Aspiration and Striving for Excellence", the Report will 繼續從「信」出發,從「『信』奉守則」、 continue to "Start Everything with 'Xin'", and the sustainable 「『信』助綠能」、「『信』誠合作」、「『信』重 development work and performance of Xinyi Solar from 1 January to 31 December 2019 (the "Reporting Period" or "Year") are fully presented in five aspects of corporate governance (including ESG governance), environment, customer and supply chain management, talent management 日期間(「報告期內」或「年內」)的可持續發 and social responsibility based on the principles of 展工作和表現,部分內容或追溯過往年份 "Compliance ('Xin'feng) with regulations", "Utilisation 或延伸至2020年度。在本報告中,如無 ('Xin'zhu) of green energy", "Genuine ('Xin'cheng) cooperation","Leverage on ('Xin'zhong) talents" and "Caring for ('Xin'huai) the world". Some content may be traced back to past years or extended to 2020. In this report, unless otherwise stated, all monetary amounts are stated in Hong Kong dollars (HK\$). During the Reporting Period, the Company has complied with the disclosure requirements of the "comply or explain" provisions as set out in the ESG Reporting Guide.

This Report covers the Company and its wholly-owned and nonwholly-owned subsidiaries located in Mainland China, Hong Kong, Malaysia, Canada, and their principal businesses, which include: (i) production and sale of solar glass; (ii) development and operation of solar farms; and (iii) provision of engineering, procurement, and construction ("EPC") services.

光能」或「本公司」)及其附屬公司(「**集團**」 或「本集團」)按照香港聯合交易所有限 管治([ESG])報告》([本報告])。

告,以「『信』守初心,臻於至善」為主題, 英才」及「『信』懷天下」對應企業管治(含 ESG事務管治)、環境、客戶及供應鏈管 理、人才管理及社會責任五個方面完整呈 現信義光能於2019年1月1日至12月31 特別説明,所有貨幣金額均以港元列示。 報告期內,本公司已遵守 ESG 報告指引所 載「不遵守就解釋」條文的披露要求。

本報告涵蓋本公司及其位於中國大陸、香 港、馬來西亞、加拿大的全資及非全資附 屬公司及其進行的主營業務,包括:(i)生 產及銷售太陽能玻璃;(ii)發展及營運太 陽能發電場;及(iii)提供工程、採購及建 設(「EPC」)服務。

Unless otherwise stated, the performance data of the Company mentioned in the reporting scope are reported on a 100% basis, without adjustment based on the share of equity of Xinyi Solar.

有關環境及社會關鍵績效指標編製,分別 Regarding the preparation of environmental and social key performance indicators (KPIs), the Group refers to the Reporting 參考香港聯交所《環境關鍵績效指標匯報 Guide on Environmental KPIs 《環境關鍵績效指標匯報指引》) 指引》及《社會關鍵績效指標匯報指引》, and the Reporting Guide on Social KPIs (《社會關鍵績效指標匯 並基於重要性原則及適用性原則選擇披露 報指引》) issued by the Hong Kong Stock Exchange, and selects 範圍、進行數據收集,以及根據適用於公 the scopes of disclosure based on the principles of materiality 司所屬行業及業務地理位置的參數進行計 and applicability, collects and calculates data based on the 質。 parameters applicable to the industry and the geographical location of the business of the Company.

This Report is available for download at the website of the 本報告可於香港聯交所網站 Hong Kong Stock Exchange (www.hkexnews.hk) and the (www.hkexnews.hk)及本公司網站 website of the Company (www.xinyisolar.com). (www.xinyisolar.com)下載。 This Report should be read in conjunction with Xinyi Solar's 建議本報告連同信義光能2019年報一併

2019 Annual Report. This Report is published in Chinese and 閲覽;本報告以中、英文兩種文字出版, English. In case of any discrepancy between the two versions, 若兩種版本出現差異,請按中文版解讀。 the Chinese version shall prevail

The Report was approved by the board of directors (the 本報告於2020年7月10日獲本公司董事 "Board") of the Company on 10 July 2020. If you have any 會(「董事會」)通過。如對本報告的內容有 questions or suggestions regarding the contents of this Report, 任何疑問或建議,歡迎來電或來函詢問。 please contact us by phone or by mail. Our contact details are 我們的聯繫方式如下: as follows:

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除另有説明外,報告範圍內所提及公司的

表現數據均按百分百基準匯報,並未基於

信義光能的權益份額作出調整。

信義光能控股有限公司

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ABOUT US 關於我們

Adhering ('Xin'shou) to Our Original Aspiration by Focusing on the Sustainable **Development of Business**

ABOUT US

關於我們

Xinyi Solar is the world's largest solar glass manufacturer, listed 信義光能是全球最大的太陽能玻璃製造 on the Main Board of the Hong Kong Stock Exchange on 12 December 2013 (stock code: 00968.HK). The Group specialises in the research and development, manufacturing, sales and after-sales services of solar glass. Major products include ultraclear patterned solar glass (raw or tempered), coated solar 壓花玻璃(原片及鋼化片)、太陽能鍍膜 glass, back glass, etc. We provide solar glass products to major solar module manufacturers in the world, which accounts for more than thirty percent of the global market share. As 超過三成的市場份額。截至2019年12月 of 31 December 2019, the Group has three major solar glass 31日,本集團共擁有三大太陽能玻璃生 production bases, which are located in Wuhu City of Anhui 產基地,分別位於中國安徽省蕪湖市、天 Province, Tianjin Municipality in China and Malacca City in 津和馬來西亞馬六甲市,擁有日熔量總計 Malaysia respectively. The solar glass production lines have a 7,800噸的太陽能玻璃生產線。此外,本 total daily melting capacity of 7,800 tonnes. In addition, the Group plans to build the fourth solar glass production base in 海市建設第四個太陽能玻璃生產基地,同 Beihai City of Guangxi Zhuang Autonomous Region in 2020, and will add two solar glass production lines with a daily melting capacity of 1,000 tonnes each as well. The Group also intends to add two more solar glass production lines in Wuhu, 產線。 Anhui with a daily melting capacity of 1,000 tonnes each.

The Group has commenced the production of solar glass since 2008. As a supplier of necessary components for photovoltaic ("PV") modules, the Group supports the development of solar power industry with high quality and diversified products. Our pursuit of details and dedication to innovation have gradually established Xinyi Solar's leading position in the solar glass 業的領先地位。 industry.

「信 | 守初心, 堅定可持續發展 業務

商,於2013年12月12日在香港聯交所 主板上市,股票代碼:00968.HK。本集 團專業從事太陽能玻璃的研發、製造、銷 售及售後服務,主要產品包括超白太陽能 玻璃及背板玻璃,為全球主要的太陽能組 件廠商提供太陽能玻璃產品,佔有全球 集團計劃於2020年在廣西壯族自治區北 時將新增兩條每條日熔量1,000噸的太陽 能玻璃生產線,並有意在安徽蕪湖再增加 兩條每條日熔量1,000噸的太陽能玻璃生

本集團自2008年開始生產太陽能玻璃, 以光伏組件必要組成部件供應商的身份, 用高品質和多樣化的產品為太陽能行業的 發展保駕護航。對細節的追求、對創新的 執著,逐漸奠定信義光能在太陽能玻璃行

With the corporate value of "integrity and passion", the Group has always adopted an aggressive attitude to break through its comfort zone and seek for a more comprehensive business model. Therefore, after the solar glass business has achieved remarkable development, the Group has expanded its business coverage from upstream manufacturing to end-user solar farm development, construction and operation. In June 2012, the Group's first self-built rooftop Golden Sun Demonstration Project was successfully connected to the grid for power generation, which provided an opportunity for the Group to expand its solar farm business. 2019 was the tenth anniversary for the launch of the Golden Sun Demonstration Project Policy, which was also a significant and meaningful year for the Group. The successful spin-off and separate listing of our solar farm operation business on the Hong Kong Stock Exchange marked a new stage for the Group's solar farm business. Upon completion of the spin-off, the Group operates its solar farm operation and management business through Xinyi Energy Holdings Limited ("Xinyi Energy", stock code: 03868.HK), in which the Group holds 52.7% equity interest. Upon completion of the spin-off, the Company continues to engage in the business of the development and construction of solar farms, while the business of the operation and management of solar farms is conducted under Xinyi Energy. The successful spin-off of Xinyi Energy also enables the Group to further strengthen the foundation for the high-quality development of the solar farm business, and further expand the Group's overall investor base and enhance its financial capability.

「義氣崢嶸,自強不息」的企業價值觀敦促 本集團一直懷抱超越的進取心態,突破舒 適區,尋求更完善的業務模式,因此,在 太陽能玻璃業務取得長足發展後,本集團 將業務版圖從上游的製造業拓展至終端的 太陽能發電場開發、建設和營運。2012 年6月,本集團首個屋頂自建金太陽示範 項目成功併網發電,為本集團開拓太陽能 發電場業務提供了契機。2019年是金太 陽示範工程政策出台的第十年,對於本集 團而言,也是具備重要意義的一年。成功 分拆太陽能發電場營運業務並於香港聯 交所獨立上市,標誌著本集團的太陽能發 電場業務邁進新的階段。完成分拆後,本 集團透過持股52.7%的信義能源控股有 限公司(「**信義能源**」,股份代號:03868. HK)經營太陽能發電場營運及管理業務。 完成分拆後,本公司繼續從事太陽能發電 場的開發及建設業務,而太陽能發電場的 經營及管理業務則歸屬於信義能源。成功 分拆信義能源亦令本集團進一步夯實太陽 能發電場業務高質量發展的基礎,並進一 步擴大本集團整體投資者基礎及增強財務 能力。

ABOUT US COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

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Committing to its philosophy of "being detail-oriented, remains innovative and strives for excellence", the Group has never slowed down its development in the solar glass sector. In response to the industry's demand for cost reduction and efficiency enhancement, the Group overcame the difficulties of cost reduction through research and development, successfully promoted the commercial production of 2.0mm products in 2019, and further enriched its product portfolio. To seamlessly connect with the latest solar cell technology, the Group fully supports module manufacturers to further improve the conversion efficiency of solar modules.

As of 31 December 2019, the total scale of solar farm projects developed, constructed and grid-connected by the Group amounted to 2,630MW. Among which, 2,474MW was cumulative approved grid-connected capacity from utilityscale ground-mounted solar farm projects and 156MW was commercial and self-use distributed projects, with a leading 國非國營的太陽能發電場擁有人及運營商 position among the non-state-owned solar farm owners and operators in China. As of the end of 2019, the cumulative gridconnected capacity of PV power generation in China reached 204GW, and PV power generation accounted for approximately 3.1% of China's total electricity generation. The Group adheres 千家萬戶。 to its original aspiration of "leading green new energy" to relentlessly introduce new green energy to thousands of households.

In addition, the Group also provides EPC services to third parties as a supplementary business to the Group through its own EPC team. During the Year, the Group carried out 助性業務。年內,本集團主要透過持股 residential and commercial distributed power generation projects in Canada mainly through its 60%-owned Polaron Solartech Corporation

在太陽能玻璃領域,本集團亦未有放緩 步伐 — 「始於細節,堅持創新,臻於至 善」。應對行業降本增效的訴求,本集團 通過研發攻克成本難題,於2019年成功 推動2.0mm產品的商業化生產,再度豐 富產品組合,為以無縫銜接最新的太陽能 電池技術,全力支援組件商進一步提高太 陽能組件的轉換效率。

截至2019年12月31日,由本集團開 發、建設且併網的太陽能發電場項目總規 模為2,630兆瓦,其中大型地面太陽能發 電場項目累計核准併網容量2,474兆瓦及 156兆瓦為商業及自用分佈式項目,在中 處於領先地位。截至2019年底,中國光 伏發電累計併網裝機達204 吉瓦,光伏發 電佔比約3.1%。本集團本著「引領綠色新 能源」的初心孜孜不綴將綠色新能源引入

此外,本集團亦诱過內部工程總承包團隊 為第三方提供 EPC 服務,作為本集團的輔 60%的Polaron Solartech Corporation於 加拿大開展住宅及商業分佈式發電項目。

During the past years of operation, the Group strived to shoulder its corporate responsibility in promoting regional economic prosperity, achieving environmental sustainability and social welfare, and devoted to making more contributions to the Earth, the society and the Group's stakeholders (the "Stakeholders"). Therefore, we obtained recognition, trust and support from various sectors. Based on the latest available review results up to the date of the Report, the Group is a constituent of the Hang Seng Corporate Sustainability Benchmark Index (HSSUSB), which is rated by the Hong Kong Quality Assurance Agency (HKQAA), an independent professional assessment body, in accordance with the sustainability rating framework designed by it, and ranked by corporate sustainability performance scores, with the top 20% of the stocks being selected as index constituents, representing a recognition of the Group's corporate sustainability performance. During the Year, the Group was approved by the HKQAA's Green Finance Certification Scheme and was awarded Pre-issuance Stage Certificate, certifying that the Group's solar glass production base projects and solar farm projects have met the requirements as green projects. During the Reporting Period, the Group also successfully obtained green loans from two commercial banks to support the Group's green production and sustainable development plan.



GREEN HKQAA Pre-Issuance Stage Certificate Number: CC 6722

In addition, the Group is also a constituent of a number of indexes, including Hang Seng Composite Index (HSCI), Hang Seng Global Composite Index (HSGCI), MSCI All Country World Index (MSCI ACWI), MSCI Emerging Markets Index (MSCI EM), MSCI China Index (MSCI CHINA), MSCI Golden Dragon Index (MSCI GOLDEN DRAGON) and MSCI Zhong Hua Index (MSCI ZHONG HUA), and is well received by the capital market.

在過往經營期間,本集團竭力承擔在促進 地區經濟繁榮、實現環保永續發展及社會 公益方面的企業責任,並致力為地球、社 會及本集團利益相關方(「持份者」)做得 更多,亦因此獲得各界的認可、信賴及支 持。根據截至報告發行日最新可獲悉之檢 討結果,本集團為恆生可持續發展企業基 準指數(HSSUSB)成分股,該指數由獨立 的專業評審機構香港品質保證局按照其設 計之可持續發展評級框架進行評級,並依 照企業可持續發展表現分數進行排名,評 分位列首20%的股份將獲選為指數成分 股,可見本集團在企業可持續發展方面表 現獲得認可。本集團於年內通過香港品質 保證局綠色金融認證,獲頒綠色金融發行 前證書,認證本集團的太陽能玻璃生產基 地項目及太陽能發電場項目符合其綠色項 目的要求。報告期內,本集團亦成功獲得 兩家商業銀行提供的綠色貸款,助力本集 團的綠色生產和永續發展計劃。





此外,本集團亦為恆生綜合指數(HSCI)、 恆生環球綜合指數(HSGCI)、MSCI全球指 數(MSCI ACWI)、MSCI新興市場指數(MSCI EM)、MSCI中國指數(MSCI CHINA)、MSCI 金龍指數(MSCI GOLDEN DRAGON)及MSCI 中華指數(MSCI ZHONG HUA)等多個指數 成分股,備受資本市場關注。

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Sustainable Development Philosophy

The theoretical potential for renewable energy ("RE") 全球可再生能源的總技術潛力大大超過全 greatly exceeds all the energy that is used by all economies on Earth. The technical potential for solar energy is the highest among the RE sources.

The Special Report on Renewable Energy Sources and Climate Change Mitigation ("SRREN") by Intergovernmental Panel on Climate Change (*"IPCC"*)

The United Nations proposed 17 "Sustainable Development 聯合國於2015年向全球所有國家提出 Goals" ("SDGs") to all countries around the world in 2015, replacing the Millennium Development Goals which applied primarily to developing countries. With the combined efforts of 並對其寄予厚望,認為在全球所有國家、 all countries, local governments, private sectors/organisations and individuals across the globe, the SDGs have the power to change the world and can be the blueprint to achieve a better 人更美好和更可持續未來的藍圖。 and more sustainable future for all.

The climate change caused by human activities has affected 人類活動引發氣候變化,已影響和威脅原 and threatened the original lifestyle of human and the future of our planet. By addressing the issue of climate change, we can create a sustainable world for everyone, but we must act immediately. IPCC pointed out that historically, economic development is closely related to the increase in energy use and greenhouse gases emission, and renewable energy can help to get rid of such correlation and contribute to sustainable development.

Since its establishment, the Group has been providing renewable energy services, whether it is for providing backup support for the PV industry with precise production or providing green solar energy for the society by extending its solar farm business. We have always been committed to "achieving our far-reaching visions without sparing any effort", as we understand that "great oaks from little acorns grow" and our future is determined by our present efforts. The Group adheres to its core corporate values of "trust, integrity, passion and people" and integrates the ideas contained in these four

可持續發展理念

球能源需求。在可再生能源中,太陽能的 技術潛力最大。

政府間氣候變化專門委員會 (「IPCC」)《可再生能源與減緩氣候 變化》特別報告

十七項「可持續發展目標」(「SDGs」),替 代僅針對發展中國家的「千年發展目標」, 地方政府、私營機構/組織及個人的共同 努力下,SDGs可以變革世界,實現所有

本的生活方式和地球的未來。通過解決氣 候變化問題,可以為所有人創造一個可 持續的世界,但必須立即行動。IPCC指 出,歷史上,經濟發展與能源利用和溫室 氣體排放的增加密切相關,而可再生能源 有助於擺脱這種相關性,從而為可持續發 展做出貢獻。

本集團自成立伊始便是為可再生能源服 務,無論是以精工製造在後方為光伏行業 提供支撐,還是延伸至太陽能發電場業務 為社會提供綠色光能,我們始終[懷抱遠 大理想,不輟點滴努力」,只因我們明白 「合抱之木,生於毫末」,眼前的細節決 定了我們的「詩和遠方」。本集團堅守企業 的核心價值觀[信譽至上,義氣爭榮,自 **強不息,善待天下**」,並將這十六字所蘊 含的思想結合「綠色環保,永續發展」的

words with our **business concept** of "green and sustainable development" to comprehensively get involved in various aspects such as solar glass production, solar farm development and operation, employee relations, quality control, supply chain management, corporate governance and community participation. We will continue to pay attention to and actively respond to the opinions and demands of major stakeholders.

With the corporate mission of "leading green new energy", the Group has fully integrated the SDGs introduced by the United Nations into its daily operations and the formulation of the Company's long-term development strategies, actively responded to the United Nations' call and demonstrated its determination and action to address major global issues. We have been working hard and devoted to the great cause of improving the living environment of human beings with responsible corporate behavior, achieving our corporate vision of "creating an outstanding glass company and establishing a world-class brand".



Enterprise Mission and Core Value of Xinyi Solar 信義光能企業使命與核心價值觀

經營理念, 全面滲透及落實在太陽能玻璃 生產、太陽能發電場開發及營運、員工關 係、品質管控、供應鏈管理、企業治理、 社區參與等方方面面,並目持續關注及積 極回應主要持份者的意見與訴求。

肩負**「引領綠色新能源」**的企業使命,本 集團將聯合國可持續發展目標充分融入到 日常營運及公司長期發展戰略的制定中, 積極回應聯合國的呼籲,展現應對全球性 重大問題的決心和行動力。我們一百在努 力,以負責任的企業行為投身改善人類生 活環境的偉大事業,實現我們的企業願 景「締造傑出玻璃企業,成就世界一流品 牌」∘

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

2019表現不凡,兩大核心業務齊頭並進

LEVERAGE ON ('XIN'ZHONG) TALENTS TO 「信」重英才,完善人才管理

2019 Economic Performance Highlights

ABOUT US

關於我們



2019年經濟表現摘要

millior Record high n 百萬港元 創歷史新高 Consolidated net profit (+29.7% year-on-year) 综合純利(同比+29.7%)

28 cents 港仙 НК¢ Earnings per share (2018: HK24.87cents) 每股盈利(2018年:24.87港仙)

HK\$ **14.0** ^{cents}港仙 Dividend per share (2018: HK12.2cents) 每股股息(2018年:12.2港仙

HK\$ 8.5 cents 港仙 Among which, distribution of a final dividend is proposed 其中,建議派發末期股息



HK\$ 百萬港元

Cash and cash equivalents (2018: HK\$784 million) 現金及現金等價物(2018年:784百萬港元)

.683 million 百萬港元 нк\$ 🚺 Bank loans (2018: HK\$8,770 million) 銀行貸款(2018年:8,770百萬港元)

24.0%

Net gearing ratio (2018: 66.2%) 淨負債率(2018年:66.2%)

1.8

Current ratio (2018: 1.0) 流動比率(2018年:1.0)



馬來西亞馬六甲(1,900噸/日) 本集團首個海外生產其地 Malacca, Malaysia (1,900T/D) seas production base of the Group

Distribution of Solar Farm Projects 太陽能發電場項目分佈

As of 31 December 2019, the Group developed, constructed and held 27 utility-scale ground-mounted solar farm projects (2,474MW) across 8 provinces and municipalities in the PRC as well as 8 distributed generation projects (156MW), with an aggregate grid-connected capacity of 2,630MW.

截至2019年12月31日,本集團於中國8個省、直轄市開發、建設及持有 27個大型集中式地面太陽發電場項目(2,474兆瓦),8個分佈式項目(156兆 瓦),總併網規模達2,630兆瓦。

During the Reporting Period, the newly approved grid-connected capacity of the Group increased by 130MW.

報告期內,本集團新增併網容量130兆瓦。

Our solar farm business recorded steady development in 2019. Benefitting from the increase in the total approved grid-connected capacity, the revenue of the Group's solar farm business segment increased by 16.0% year-on-year, and the gross profit margin further increased to 76.5% with the increasing scale and automation of the management of our solar farm projects.

太陽能發電場業務在2019年錄得平穩發展,受惠於總核准併網規模的提 升,本集團太陽能發電場業務分部收入按年增長16.0%,而隨著發電場項 目管理規模化及自動化,毛利率進一步提升至76.5%。

Two Core Businesses Achieved Outstanding Performance in 2019

Distribution of Solar Glass Production Capacity 太陽能玻璃生產產能分佈

As of 31 December 2019, the Group has three solar glass production bases, which are located in Wuhu City of Anhui Province, Tianjin Municipality in China and Malacca City in Malaysia respectively, with a total daily melting capacity of 7,800 tonnes.

截至2019年12月31日,本集團於中國安徽省蕪湖市、天津市,以及馬來 西亞馬六甲擁有3個太陽能玻璃生產基地,在產產能日熔量為7,800噸。

During the Reporting Period, the cold repair of two production lines with a production capacity of 600 tonnes and 500 tonnes per day were completed in the second guarter and third guarter, respectively, resulting in a year-onyear increase of 16.9% in production capacity.

報告期內,本集團於第二季度及第三季度分別完成了1條600噸/日的生產 線及1條500噸/日生產線的冷修,產能按年增長16.9%。

Our solar glass business achieved considerable breakthroughs in 2019. Benefitting from the improvement of product portfolio, the increase in sales unit price and the growth in production capacity, the Group's solar glass business segment achieved an increase in revenue of 21.7% year-on-year, while the proportion of overseas sales increased to 27.5%. The gross profit margin increased by 5.9 percentage points year-on-year to 32.1%.

太陽能玻璃業務在2019年取得可觀突破,受惠產品組合優化,銷售單 價提升以及產能增長的利好,本集團太陽能玻璃業務分部收入按年增長 21.7%,海外銷售佔比提升至27.5%,毛利率按年增加5.9個百分點至 32.1% •



ABOUT US COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永續發展

2019,我們繼續負碳前行

化碳排放量覆蓋率為111%。

碳減排量對比太陽能玻璃生產產生的二氧

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALE **IMPROVE TALENT MANAGEMENT** 「信」重英才,完善人才管理

2019 Sustainability Performance Highlights 2019年可持續發展表現摘要

關於我們

In 2019, we continue our business with negative carbon emission

The carbon dioxide (CO₂) emission reduction from green 太陽能發電場產生綠色電力帶來的二氧化 electricity generated by solar farms compared to the CO, emission from solar glass production was 111%.

	Environment 環	境		
	Solar glass production 太陽能玻璃生產	Solar farm business 太陽能發電場業務		
ېز b c	decreased by 1.8% year-on-year 溫室氣體排放密度 ^(附註1) 同比下降 1.8% Intensity of hazardous wastes decreased by 2.7% year-on-year 有害廢棄物密度同比下降 2.7% Intensity of non-hazardous wastes increased by 2.4% year-on-year 無害廢棄物密度同比上升 2.4% Emission reduction of sulphur dioxide (SO ₂) (Note ²), nitrogen oxides (NO _x) and smoke and dust amounted to 51.6%, 79.3% and 82.9%, respectively SO ₂ 滅排量 ^(附註2) 51.6%, NO _x 滅排量 79.3%, 煙塵減排量 82.9%	 Approved grid-connected capacity of solar farms was 2,630MW 太陽能發電場已核准併網規模2,630兆瓦 Power generation for the Year was approximately 2.6 billion kWh, representing a year-on-year increase of 24% 年度發電量約26億度,同比+24% Can meet the annual electricity consumption demands for almost 1.29 million households 可滿足近129萬戶家庭年用電需求 Equivalent to saving 0.79 million tonnes of standard coals (Note 3) 相當於節約標準煤(開註3)79萬噸 Emission of CO₂ reduced by 2.17 million tonnes (Note 3) 二氧化碳減排量達217萬噸(開註3) Equivalent to planting 94.57 million trees 相當於種植樹木9,457萬棵 		
道 a b c	 3.4% year-on-year 能源消耗密度同比下降3.4% Intensity of water consumption decreased by 13.7% year-on-year 用水密度同比下降13.7% 			

Notes:

- (1) Since 2019, the Group has adjusted the calculation bas intensity of pollutant/waste emission and resources con from tonnes of finished products to per square metre o products, mainly due to the fact that the Group has enriched the specifications of mainstream products sales of solar glass are also priced in square metres. the calculation basis of pollutant/waste emission inte resource consumption intensity changed to square met appropriate.
- (2) Reduced emission = (1 emission of air pollutants/prod air pollutants) *100%
- (3) The conversion coefficient refers to the China Power 20 電力行業年度發展報告2019》) issued by China Electricity

- Improve ESG management structure, consolidate the Group's existing regulatory organisations in the and complete the preliminary proposal of the ESG working group 管組織,完成 ESG 工作小組的初步構想
- Identify ESG risks (including climate change risks), understand the importance of effective consider ESG risk factors in advance when formulating corporate strategies and long-term plans 有意在制定公司戰略及長期規劃時預先考量ESG風險因素
- guidelines, and eventually determined the material issues under the supervision of the Board 及國際指引,最終在董事局的監管下釐定重要性議題

附註:

asis of the	(1)	2019年起,本集團調整污染物/廢棄物
nsumption		排放密度及資源耗用密度的計算基準,
of finished		由按生產產成品的噸數轉為使用按生產
gradually		產成品的每平方米數,主要由於本集
s and the		團目前逐步豐富主流產品的規格,加上
Therefore,		太陽能玻璃銷售亦是以平方米計價,故
ensity and		以平方米數作為污染物/廢棄物排放密
re is more		度, 及資源耗用密度的計算基準更為合 適。
duction of	(2)	減排量=(1-大氣污染的排放量/大氣 污染物產生量)*100%
D19(《中國 y Council.	(3)	換算系數參考中國電力企業聯合會《中國 電力行業年度發展報告2019》。

Corporate Governance 企業管治

social and corporate governance areas based on the structure of the Environmental Protection Office,

完善ESG事務管理架構,在環保辦架構的基礎上,提出整合集團現有對應社會範疇及企業管治範疇的監

management and control of ESG risks to the sustainable development of the Group, and intend to

識別ESG風險(包含氣候變化風險),明白對ESG風險的有效管理及監控對集團可持續發展的重要性,並

Adopt a more scientific tool to conduct a materiality assessment systematically, with reference to internal and external stakeholders' opinions, industry-related material issues and international

採用更科學的工具系統性地進行重要性評估,綜合參考內部及外部持份者的意見、行業相關的重大議題

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO 「信」重英才,完善人才管理

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

Corporate Governance

關於我們

Governance philosophy

The Group adheres to the concept of "STRC" in corporate 本集團在企業管治方面奉行[STRC]概 governance, which refers to Systematic, Transparent, Reliable and Considerate. On the basis of strict compliance with the Corporate Governance Code as set out in Appendix 14 to the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange, the Group implements the concept of "STRC" on governance matters to regulate the daily business operations, ensure that all business activities and decisions of the Group are in compliance with the requirements of the laws and regulations and business ethics of the place where the business is located, and maintains a good, responsible, mature and professional corporate image.

企業管治 管治理念

念:體制健全(Systematic)、公開透明 (Transparent)、 誠 實 可 信 (Reliable)、 專業縝密(Considerate)。在嚴格遵守香 港聯交所證券上市規則附錄十四所載的企 業管治守則基礎上,本集團在管治事宜 上貫徹[STRC]理念,以規範日常業務營 運,確保本集團之所有業務活動及決策符 合業務所在地法律法規的要求及商業道德 規範,維持良好、盡責、成熟、專業的企 業形象。



信義光能「STRC」管治之道

Compliant operation

During the Reporting Period, the Group strictly complied with the requirements under the laws and regulations in the countries and regions where it operates in respect of environmental protection and pollution prevention, labour relations, corporate operation and governance to ensure that its production and operation are in compliance with laws and regulations, and proactively moved towards higher standards in relevant areas to give full play to its role as a leading corporate. During the Reporting Period, the major laws and regulations that the Group complied with in respect of environmental protection and pollution prevention, labour relations, corporate operation and governance include:

Environmental protection and pollution prevention 環境保護及污染防治

Mainland China 中國內地

Environmental Protection Law of the People's Republic of China 《中華人民共和國環境保護法》 Law of the People's Republic of China on Environmental Impact Assessment 《中華人民共和國環境影響評價法》 Administrative Regulations on the Environmental Protection of Construction Projects 《建設項目環境保護管理條例》 Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution 《中華人民共和國大氣污染防治法》 Law of the People's Republic of China on the Prevention and Control of Water Pollution 《中華人民共和國水污染防治法》 Law of the People's Republic of China on the Prevention and Control of Pollution from Environmental Noise 《中華人民共和國環境噪聲污染防治法》 Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste 《中華人民共和國固體廢物污染環境防治法》 Emergency Response Law of the People's Republic of China 《中華人民共和國突發事件應對法》 National Catalogue of Hazardous Wastes 《國家危險廢物名錄》

守法經營

本集團於報告期內,嚴格遵守業務所在國 家及地區在環境保護及污染防治、僱傭關 係、企業營運及管治等方面的法律法規要 求,確保生產經營合法合規,並在相關範 疇積極向更高的標準邁進,以充分發揮領 先企業的表率作用。在報告期內,本集團 在環境保護及污染防治、僱傭關係、企業 營運及管治等方面遵循的主要法律法規包 括:



Malaysia 馬來西亞

Environmental Quality Act 1974 《1974年環境素質法》 Environmental Quality Act 1987 《1987年環境素質法令》 Environmental Impact Assessment (EIA): Procedure and Requirements in Malaysia (1990) 《1990年馬來西亞環境影響評估程序》 Environmental Impact Assessment (EIA): Procedure and Requirements in Malaysia (1994) 《1994年環境影響評估指南》

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

Corporate operation and governance

企業營運及管治

Criminal Law of the People's Republic of China

embezzlement, misappropriation of funds, bribery,

《中華人民共和國刑法》(有關貪污罪、職務侵佔罪、

Product Quality Law of the People's Republic of

Malaysian Anti-Corruption Commission Act 2009

(on relevant clauses relating to corruption,

挪用資金罪、受賄罪、行賄罪等相關條款)

《中華人民共和國產品質量法》

Hong Kong, China

《防止賄賂條例》

Prevention of Bribery Ordinance

《2009年反貪污委員會法令》

中國香港

Malaysia

馬來西亞

Mainland China

中國內地

etc.)

China

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO 「信」重英才,完善人才管理

Employment relations 僱傭關係

關於我們

Mainland China 中國內地

Labour Law of the People's Republic of China 《中華人民共和國勞動法》 Labour Contract Law of the People's Republic of China 《中華人民共和國勞動合同法》 Law of the People's Republic of China on Work Safety 《中華人民共和國安全生產法》 Provisions on the Prohibition of Using Child Labour 《禁止使用童工規定》 Special Rules on the Labour Protection of Female Employees 《女職工勞動保護特別規定》

Hong Kong, China 中國香港 The Employment Ordinance 《僱傭條例》

Malaysia

馬來西亞 Employment Act 1955 《1955年勞工法令》 Occupational Safety and Health Act 1994 《1994年職業健康與安全法》 Factory & Machinery Act 1967 《1967年工廠與機械法》

Canada 加拿大 Canada Labour Code 《加拿大勞動法》

During the Reporting Period, the Group was not aware of any material non-compliance with the above laws and regulations.

報告期內,本集團並未發現任何違反上述 法律法規的重大事件。

International standardisation management system

An effective and comprehensive management system is an important foundation for an enterprise to strengthen product quality and safety management, safeguard the interests of customers, identify and control risks in a timely manner to protect employees and production safety, and enhance its ability to respond to environmental impact factors to achieve green operation. The Group's daily production and operation activities are regulated in accordance with the standards set out in the Integrated Management Manual (《一體化管理手冊》) of Xinyi Solar Group. In particular, the Group has complied with three international standards in respect of product quality control, environmental protection, pollutant monitoring and management, labour protection and production safety, namely the Quality Management Systems (ISO9001:2015), the Environmental Management Systems (ISO14001:2015) and the Occupational Health and Safety Management Systems (OHSAS18001:2007), and has established corresponding internal management procedures/systems.

> Product quality 產品品質 Internal system: quality control system 內部體系:品質監控體系



Xinyi Solar's "Three-in-One" Standardised Management System 信義光能「三位一體」標準化管理體系

XINYI SOLAR HOLDINGS LIMITED 16 信義光能控股有限公司

國際標準化管理體系

有效且完善的管理體系是企業加強產品質 量及安全管理以維護客戶利益、及時識別 及管控風險以保障員工及生產安全、提升 應對環境影響因素的能力以實現綠色經營 的重要基礎。本集團日常生產及經營活動 根據信義光能集團《一體化管理手冊》設立 的標準進行規管,其中,對於產品品質管 控、環境保護、污染物監測與治理、勞動 防護、安全生產方面的工作符合《質量管 理體系(ISO9001:2015)》、《環境管理體 系(ISO14001:2015)》以及《職業健康安全 管理體系(OHSAS18001:2007)》三項國際 準則,並已建立相應的內部管理程序/體 系。

> Environmental protection 環境保護 Internal system: environmental responsibility management system 內部體系:環境責任管理體系

Safe production 安全生產

Internal system: occupational health and safety management system 內部體系:職業健康安全管理體系

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO 「信」重英才,完善人才管理

Sound governance structure

關於我們

The Board is the highest regulatory body in the Group's business operations, decision-making and corporate governance, and the diversified composition of the Board can enhance the effectiveness of the Group's corporate governance, risk assessment and capability in responding, providing assurance for the synergetic development of the Group's economic, environmental and social benefits. The Board of the Group comprises four executive directors, two non-executive directors and three independent non-executive directors. During the Reporting Period, the Group strictly adhered to corporate governance principles by implementing the segregation of duties, strengthening supervision and duly performing its responsibilities in different governing areas.

良好的管治架構

董事會為本集團業務營運、決策規劃及企 業管治的最高監管機構,而董事會組成的 多元化有助提升本集團企業管治的效能、 風險評估及應對的能力,為本集團經濟效 益、環境效益及社會效益的協同發展提供 保障。本集團董事會由四名執行董事、兩 名非執行董事及三名獨立非執行董事組 成,於報告期內遵循嚴謹的企業管治原 則,針對不同的管治範疇明確分工、加強 監管、盡職履責。

Corporate Governance Structure and Scope of Duties of Xinyi Solar 信義光能企業管治架構及職責範圍



With a well-established and stable governance structure and continuous improvement, the Group continued to enhance its corporate governance level during the Reporting Period. The Group performed well in the areas of ethics and responsibility governance, such as regulating business operation, eliminating corruption and fraud, enhancing transparency, improving accountability mechanism, controlling guality and safeguarding customers' rights and interests, responsible procurement and fair cooperation, and made positive progress in ESG governance. For ESG governance, guality control and supply chain management, please refer to the relevant sections on pages 21, 50 to 52 and 54 - 55 of the Report respectively.

Anti-corruption

The Group strictly abides by the laws on anti-corruption and bribery in Mainland China, such as the Criminal Law of the People's Republic of China (《中華人民共和國刑法》), the Prevention of Bribery Ordinance of Hong Kong, Malaysian Anti-Corruption Commission Act 2009 and its amendments, and thoroughly implements the Xinyi Group Integrity Management System (《信義集團廉潔管理制度》) in daily production and operation. Employees and business partners are strongly required to comply with the legal provisions and the rule of law when dealing with business. All staff are prohibited from seeking personal gains by taking advantage of their powers conferred by their positions to receive cash, in-kind or other benefits for dishonesty, illegal acts or dishonesty on the part of the Group, and are also prohibited from offering bribes or other illegal benefits to customers, suppliers, regulatory authorities, government authorities and other business partners.

憑藉成熟穩定的管治架構和持續完善,本 集團於報告期內不斷提升企業管治水平, 在規範公司營運、杜絕貪腐欺詐、提升透 明度、完善問責機制、管控品質、保障客 戶權益、責任採購及公平合作等道德和責 任管治範疇表現良好,在ESG事務管治 方面更是取得積極進展。有關ESG事務管 治、品質管控及供應鏈管理可分別參閱本 報告第21頁、第50至52頁及第54至55 百相關章節。

反貪防腐

本集團嚴格遵守遵守《中華人民共和國刑 法》等中國內地反貪污賄賂法律、香港 《防止賄賂條例》、馬來西亞《反貪污委 員會法令》(Malaysian Anti-Corruption Commission Act 2009)及其修訂案相關 規定,在日常生產經營中貫徹執行《信義 集團廉潔管理制度》,堅決要求員工及業 務合作夥伴在處理業務時,遵守法律條文 及精神。所有員工禁止以權謀私,利用職 務所賦予權力收取現金、實物或其他好處 以進行不誠實、違法或導致本集團失信的 行為,同時亦禁止所有員工向客戶、供應 商、監管機構、政府機構及其他合作夥伴 行賄或提供其他非法利益。

關於我們

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

「信」重英才,完善人才管理

The Group attaches great importance to the cultivation of integrity and quality of our management personnel and employees. To strengthen the concept of anti-corruption, the Group provided 90 sessions of anti-corruption trainings for employees through regular trainings and themed trainings in 供了90次反貪污培訓,並要求全員參與 monthly meetings, and required all employees to participate 所屬地的每一次反貪污培訓,如在外地或 in every anti-corruption training in their places during the Reporting Period. For example, employees of power stations in overseas or in remote areas were also required to participate in the trainings via phone calls or video conference system. The anti-corruption trainings held during the Year covered more than 3,000 employees, which further enhanced the Group's anti-corruption culture and employees' awareness of legal compliance.

The Group carries out anti-corruption supervision in accordance with the concept of "openness and transparency", with the Xinyi Internal Control Centre as our main internal regulatory body. In 2019, the Group further strengthened internal supervision through the implementation of new regulations such as the Investigation and Handling Methods for Anticorruption Incidents (《廉潔類事件的調查及處理方法》), System for Reporting Anti-corruption Matters by Real Name (《廉潔 事項實名制通報制度》) and Trial Measures for Rewarding the 法》等新規的推行,進一步加大內部監管 Rejection of Bribery (《關於拒收行賄獎勵試行辦法》) based on 力度。同時,本集團鼓勵本集團的僱員, the established internal regulations, code of conduct and rigorous reward and punishment system, and supplemented by the regulatory system of regular integrity inspection and on-site assessment of the dispatched working group. At the same time, the Group encourages its employees, business partners and people from all walks of life to report any violations related to integrity within the Group to us through reporting channels such as letters, emails or phone calls.

由於本集團極度重視對管理人員及員工廉 潔品質的培養,為加強反腐防腐觀念建 設,於報告期內,本集團透過每月例會定 期培訓及反貪專題培訓等形式,為員工提 於較偏遠地區的電站員工亦需通過電話或 視訊會議系統參與。年內舉辦的反貪污培 訓覆蓋員工數目超過3,000人,本集團廉 潔風氣及員工守法意識得到進一步提升。

本集團遵循「公開透明」的理念開展廉潔監 管工作,內部主要監管機構為信義系內控 中心。2019年,在已建立規範的內部守 則、行為指南及嚴謹的獎罰制度,並輔以 定期的廉潔巡視、派出工作組駐點考核的 監管體制基礎上,本集團透過《廉潔類事 件的調查及處理方法》、《廉潔事項實名制 通報制度》、《關於拒收行賄獎勵試行辦 業務合作夥伴及社會各界人士透過信函 電子郵件或電話等舉報渠道向本集團舉報 任何本集團內廉潔相關的違規行為。

During the Reporting Period, the Group achieved good results in integrity management. The Group was not aware of any material non-compliance with laws and regulations that have a significant impact on the Group relating to corruption, bribery and fraud, nor any concluded legal cases regarding corrupt practices brought against the Group or its employees.

For more details of the Group's corporate governance policies and effectiveness, please refer to the Corporate Governance Report set out in the Company's 2019 Annual Report.

ESG Governance

ESG governance structure

In the past, the Group has established and continuously 過往本集團主要依循《環境管理體系 improved the Group's environmental management organisational 要求及使用指南(ISO14001:2015)》 structure and environmental management responsibility system (「ISO14001環境管理體系」)建立及持續 in accordance with the Environmental Management Systems 改進本集團的環境管理組織架構和環境管 - Requirements with Guidance for Use (ISO14001:2015) 理責任體系,並在行政總裁的指導下實施 ("ISO14001 Environmental Management System"), and 本集團環境相關的管理工作。鑒於本集團 implemented its environmental management under the guidance 兩大核心業務對環境的影響以及需要關注 of the Chief Executive Officer. In view of the impact of the 的環境風險及機遇因素有所不同,本集團 two core businesses of the Group on the environment and the 成立光伏環保辦及光伏電站環保辦對應太 different environmental risks and opportunities factors required 陽能玻璃業務及太陽能發電場業務進行環 to be concerned, the Group has established the PV Environmental 保相關工作的監督管理,並於其下屬各部 門形成「責任到人」的匯報機制,確保集團 Protection Office and the PV Power Plant Environmental Protection Office to supervise and manage the environmental 上下有序參與環境管理工作,主要針對環 protection-related work of the solar glass business and solar farm 境保護、污染排放治理等方面的工作進行 business. The Group has also formed a reporting mechanism of 規範管理,並透過關鍵績效指標的考核及 "responsibility to people" in each department under the Group 獎懲機制提高員工對環境管理工作的重視

報告期內,本集團廉潔管理工作取得良好 成效,本集團並不知悉在貪污、賄賂及欺 詐方面有任何對本集團造成重大影響的 嚴重違法違規情況,亦無任何對本集團或 本集團的僱員提出並已審結的貪污訴訟案 件。

有關本集團更詳盡的企業管治政策和成效 等,請參閱本公司2019年年報內所刊載 之企業管治報告。

ESG事務管治

ESG管治架構

關於我們

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

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to ensure orderly participation in the environmental management work of the Group, mainly focusing on the standardised management of environmental protection and the control of pollution emission, and to enhance employees' awareness and participation in environmental management through the KPI appraisal and reward and punishment mechanism. The progress of environmental protection-related work and the annual performance of the core indicators are reported to the Board by the Chief Executive Officer, and the ESG report with details of the Group's environmental management performance will also be published after review by the Board.

和參與度。環保相關的工作進度、核心指 標的年度表現由行政總裁向董事會匯報, 詳細刊載本集團環境管理表現的ESG報告 亦會經由董事會審核後刊發。





Identification of stakeholders and daily communications

Our stakeholders include: individuals or organisations that are substantively relevant to the Group's key business and/or whose actions may have a significant impact on the Company's ability to achieve its objectives. Based on the principles of relevance, influence and proximity, we identify key stakeholders and divide them into six main groups, each of which is actively communicated with by different functional departments of the Group. The Group provides diversified communication channels to ensure the systematic and effective communication with stakeholders. Benefitting from continuous and good communication, the Group can timely understand stakeholders' suggestions and expectations on the Group's business and development. It also helps the Group to identify new risks and new opportunities that may affect business operation and longterm development at an early stage, laying a foundation for the Group to constantly improve the sustainable development performance of production and operation, and formulate longterm development strategies in the future.



持份者識別及日常溝通

我們的持份者包括:與本集團的主要業務 實質相關及/或其行動有可能對公司實現 目標有重大影響的個人或組織。根據相關 性、影響力及鄰近原則,我們識別出主要 持份者並將其劃分為六個主要組別,每個 組別的持份者由本集團不同的職能部門與 其保持積極溝通。本集團提供多樣化的溝 **通渠道**,以確保持份者溝通系統化且有效 進行,並透過持續良好的溝通,及時獲悉 持份者對本集團業務及發展的建議及期 望,同時亦有助於本集團及早識別可能對 業務營運及長期發展構成影響的新風險及 新機遇,為本集團未來持續提升生產經營 的可持續發展表現,制定長期發展戰略奠 定基礎。

ABOUT US

關於我們

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助絳能,實現永續發展

GENUINE ('XIN'CHENG) COOPERATION AND GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

Maior functional

Effective Communication with Major Stakeholders	
六雨灶仍去的巨边港语燃 出	

	主要持任	分者的長效溝通機制	
Major stakeholders 主要持份者	Major functional departments responsible for communication 負責溝通的主要職能部門	Issues concerned 關注議題	Main communication channels 主要溝通渠道
い Staff 員工	Trade union, administrative department 工會、辦公室	Compensation and benefits 薪酬福利 Training and career development 培訓及職業發展 Occupational health and safety 職業健康與安全 Labour practices and compliance 勞工慣例及合規 Corporate governance 企業管治	Department/group meeting 部門/集團會議 Performance appraisal 績效考核 Training and staff activity 培訓及員工活動 Employee satisfaction survey 員工滿意度調查 Interview and opinion box 面談及員工意見箱
Governments 政府	External communication personnel, development and research department 外聯專員、開發部	Safe production 安全生產 Environmental governance and environmental protection performance 環境管治及環保績效 Corporate governance 企業管治 Charity work and community participation 慈善公益與社區參與 Economic benefit 經濟效益	Phone call/meeting 電話/會談 Site visit 實地考察 Online real-time monitoring system 在線實時監測系統 Compliance report 合規性報告
Communities 社區	Engineering department, external communication personnel, trade union 工程部、外聯專員、工會	Community investment and employment opportunity 社區投資與就業機會 Impact on ecological environment 對生態環境的影響 Corporate governance 企業管治 Economic benefit 經濟效益	Assessment on environment 環境評估 Coordination meeting 協調會議 Public welfare activity/corporate website/WeChat public account phone call/visit 公益活動/官網/微信公眾號 電話/來訪



les concerned E議題

porate governance and control 管治與風險控制 responding action to nate change 變化應對行動 ent management and nological advantage 管理與技術優勢 production and quality trol 生產與品質監控 ironmental governance environmental protection formance 管治及環保績效 nomic benefit and returns shareholders 致益與股東回報

duct quality and safety 質量與安全 vice quality and protection customer rights 品質及客戶權益保障 production and quality

生產與品質監控 ormation security and acy protection 安全及隱私保護

ply chain management

鏈管理制度 curement compliance and egrity management 合規與廉潔管理 siness ethics and fair

道德與公平交易 Responding action to climate

氣候變化應對行動

change

Main communication channels 主要溝通渠道

Shareholders' general meeting 股東大會 Annual/interim report 年度/中期報告 Investor conference and roadshow 投資者會議及路演 Factory visit 工廠參觀 Announcement/circular/press release 公告/通函/新聞稿 Phone/e-mail enquiry 電話/電郵查詢

Site visit 實地考察 Phone call/meeting 電話/會談 Questionnaire and feedback 問卷及意見反饋 Official website/WeChat public account 官網/微信公眾號

Product procurement/project tendering 產品採購/項目招標 Cooperation plan/site visit 合作計劃/實地走訪 Qualification certification and regular review on suppliers 供應商資質認證及定期審核 Phone call/e-mail/meeting 電話/電郵/會談

關於太報告

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「信」誠合作,攜手共同成長

Guide

aoods

operates

的風險

進行同業比較

Conduct peer comparison

個行業相關的重大議題

要求披露的關鍵績效指標

LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

Materiality assessment

關於我們

To better respond to stakeholders' concerns and opinions on the Group's ESG issues, during the Reporting Period, the Group enhanced the involvement of stakeholders based on its internal materiality assessment and conducted external materiality assessment by communicating with relevant groups 的參與度,透過與公司業務及發展具備重 of stakeholders that have significant connection with the Company's business and development, in accordance with the recommendations of Hong Kong Stock Exchange in relation to ESG disclosures. In addition, in identifying relevant sustainability issues, the Group has made full reference to the guidelines set out in reports issued by authoritative organisations and conducted peer comparison to propose a list of potential issues in a more scientific and comprehensive manner. At the verification stage, the material issues applicable to the Group were reviewed and confirmed by the Chief Executive 及社區參與四大範疇中確立了19項重大 Officer and senior management (including person-in-charge of each key function). The Group conducted a materiality assessment through 4 procedures, and eventually identified 19 material issues in four aspects, namely environment, talent management, corporate governance and community participation, which are presented as follows:

重要性評估

為更好地回應持份者對本集團ESG事官 的關注及意見,本集團於報告期內結合 香港聯交所ESG披露相關條文的建議, 在內部重要性評估的基礎上,提高持份者 要關聯的相關界別的溝通,進行外部重要 性評估。此外,在鑒別相關可持續發展議 題時,本集團充分參考權威機構報告的指 引,及進行同業比較,以更科學全面地擬 定潛在議題清單。在驗證階段,由行政總 裁及高級管理層(包括各主要職能相關的 負責人)審閱及確認適用於本集團的重大 議題。本集團通過4項程序進行重要性評 估, 並最終在環境、人才管理、企業管治 議題・呈列如下:







The above material issues are further elaborated in the relevant sections of the Report.

Determine the priority of issues by combining the opinions of internal and external major stakeholders, balancing the materiality of relevant issues between the sustainable development of the Group and the stakeholders considering the future potential risk factors and aiming at achieving the sustainable development of the Group

結合內部及外部主要持份者的意 平衡相關議題對本集團可持 續發展的重要性, 並考慮未來潛 在出現的風險因素及以實現本集 團的可持續發展為目標,確定議 題的傷先次序



Submit the list of issues (arranged in descending order of materiality) to Chief Executive Officer and senior management for review and eventually determine the 19 material issues in four aspects

將以優先次序排列的議題清單 提呈行政總裁及高級管理層審 核及最終確定四大範疇的19項

9 MATERIAL ISSUES 項重大議題

		5
ement 人才管理	Corporate governance 企業管治	
安全	G1 Product quality and safety	產品質量與安全
人才吸引	G2 Quality control and after-	品質監控與售後服務
人才保留	G3 Information security and { privacy protection	言息安全及隱私保護
 發展	G4 Integrity management and compliant operation	兼潔管理及守法經營
容	G5 Responsible procurement and procurement performance	責任採購與採購績效
nment 環境	G6 Supplier management {	共應商管理
放及廢氣	Community participation 社區參戶	۹ کې
 水管理	C1 Community relations and ecosystem protection	社區關係與生態保護
怎對策略	C2 Charity work	慈善公益
管治及目		
Talent management 人才管理	G Corporate governance 企業管治	Community participation 社區參與

本報告相關章節亦就上述重大議題分別作 出進一步闡述。

關於我們

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信 |助綠能, 實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

「信」重英才,完善人才管理

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永續發展

Solar glass manufacturing is a high energy consumption 太陽能玻璃製造屬高能耗行業。為減少對 industry. To reduce the impact on the environment and resources, the Group actively adopts various energy conservation and emission reduction measures, deploys and optimises environmental protection equipment to reduce the generation of exhaust gases, greenhouse gases, sewage, wastes and noise during the production process of solar glass. As such, the emission of pollutants can continuously meet or even be better than the emission standards of laws and regulations, and the unit energy consumption of products can be reduced through the improvement of production process and efficiency enhancement, achieving reasonable and efficient use of resources.

The Group has obtained the certification of ISO14001 本集團已取得ISO14001環境管理體系認 environmental management system and established an internal environmental responsibility management system, in which a PV environmental protection office responsible for coordination and supervision has been set up to implement strict environmental and resources management for solar glass production. The Group is also subject to external review by certification bodies (such as TÜV SÜD) on a regular basis to ensure that the Group's production is carried out in strict compliance with the requirements of the system standards. In addition, the Group passed the HKQAA's Green Finance Certification during the Year. Currently, all of the Group's production bases in operation are green projects certified by HKQAA, meeting its requirements on greenhouse gases emission, pollutant prevention and control, energy management, etc. The environmental data of the solar glass business is collected by various production departments and reported to the PV Environmental Protection Office on a regular basis. The PV Environmental Protection Office performs supervision and audit duties and assists the Chief Executive Officer to continuously improve the environmental performance of relevant business.

環境及資源的影響,本集團積極採取各種 節能減排措施、配置及優化環保設備,降 低太陽能玻璃生產過程中產生的廢氣、溫 室氣體、廢水、廢棄物及噪聲,令污染物 的排放持續滿足甚至優於法律法規的排放 標準, 並诱過生產工藝的改善及效率提 升,降低產品單位能耗,達到資源的合理 及高效使用。

證, 並已建立內部環境責任管理體系, 設 有光伏環保辦負責統籌及監管,對太陽能 玻璃生產實行嚴格的環境及資源管理。本 集團亦會定期接受認證機構(如TÜV南德) 的外部評審,以確保本集團的生產嚴格按 照體系標準要求執行。此外,本集團於年 內通過香港品質保證局綠色金融認證,目 前本集團所有在營運中的生產基地均屬 於香港品質保證局綠色金融認證的綠色 項目,符合其對溫室氣體排放、污染物防 治、能源管理等方面的要求。太陽能玻璃 業務的環保數據由各生產部門負責收集, 定期向光伏環保辦匯報,光伏環保辦履行 監管及審核職責,並協助行政總裁持續改 善相關業務的環境表現。

Conventional Environmental Protection Facilities and Energy-saving Measures at the Green Production Bases 綠色生產基地之常規環保設施及節能減排措施

(4 Energy saving measure 節能減排措施

- (i) Desulphurisation equipment 脱硫裝置
- (ii) SCR denitrator SCR脱硝裝置
- (iii) Electrostatic precipitator 靜電除塵裝置
- (iv) Residual heat power generation equipment 餘熱發電裝置
- (v) Rooftop distributed solar power system 屋頂分佈式太陽能系統
- (vi) Waste recycling facilities 廢物回收設施
- (vii) Water recycling system (sewage treatment and recycling system) 水循環系統(污水處理回收系統)
- (viii) Use of clean energy (natural gas) 使用清潔能源(天然氣)
- (ix) Regular maintenance and energy-saving upgrades 定期維修及節能升級

Note: (1) The source of purchased electricity is generally coal-fired 附註(1):外購電力一般來源為燃煤火電,對 環境污染較大。 power, which causes greater environmental pollution.

Environmental benefit index 環保效益指標	
To reduce the emission of sulphur dioxide (SO ₂) 減少二氧化硫(SO ₂)排放量	
To reduce the emission of nitrogen oxides (NO _x) 減少氮氧化物(NO _x)排放量)
To reduce the emission of particulates 減少顆粒物排放量	
To reduce purchased power (Note 1) and indire emissions of greenhouse gases	ect
降低外購電量 ^(附註1) ,減少間接溫室氣體排放量	
To reduce purchased power $^{(\mbox{Note 1})}$ and indired	ect
emissions of greenhouse gases 降低外購電量 ^{(附註1),} 減少間接溫室氣體排放量	
To reduce hazardous and non-hazardous was	ste
discharge	
減少有害及無害廢棄物排放量	
To increase water resources recycling rate	
提高水資源循環利用率	
To reduce direct emission of greenhouse gases	
減少直接溫室氣體排放量	
To reduce the energy and resources consumpti	on
per unit product	

降低單位產品的能源及資源耗用量

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永績發展

GENUINE ('XIN'CHENG) COOPERATION AND GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

During the Reporting Period, the major treatment techniques, 報告期內,本集團就減少太陽能玻璃生產 disposal methods, monitoring methods and applicable 中產生的污染物所採取的主要治理技術、 standards adopted by the Group to reduce the pollutants 處置方法、監測方法以及適用標準歸納如 generated in the production of solar glass are summarised as follows:

關於我們

下:

Pollutant 污染物	下reatment and control/disposal 治理/處置	Monitoring method 監測方法	Applicable standard 適用標準
二氧化硫(SO ₂)	 Use natural gas as fuel 使用天然氣作為燃料 Equipped with facilities for desulphurisation, denitrification and dedusting 脱硫脱硝除塵裝置 Adjust the amount of ammonia water used 調整氨水用量 	Install an online monitoring system for flue gas at the exhaust port and set monitoring points for 24-hour continuous monitoring. The monitored data is uploaded through the CEMS System. 於排氣口安裝煙氣在線監測系統,並設 監測點位進行24小時連續監測,監測數 據通過 CEMS 系統上傳 The Wuhu, Tianjin and Malaysian plants have been networked to their respective local environmental supervisory departments, and the government implements monitoring to ensure that emissions data are up to standard. 蕪湖、天津及馬來西亞廠房已分別與當 地環保監管部門實現聯網,由政府實施 監測,確保排放數據達標	The Wuhu and Tianjin plants: 無湖及天津廠房: Emission Standard of Air Pollutants for Flat Glass Industry (GB26453-2011) 《平板玻璃工業大氣污染物排放標準 (GB26453-2011)》 National Standard: SO ₂ ≤400mg/m ³ ; NO _x <700mg/m ³ ; smoke and dust<50mg/m ³ 國家標準: SO ₂ ≤400mg/m ³ : NO _x <700mg/m ³ ; Dege <50mg/m ³ Local emission standards at Wuhu and Tianjin 蕪湖及天津地方排放標準 Malaysian Plant: 馬來西亞廠房: National Standard: SO ₂ ≤800mg/m ³ ; NO _x <800mg/m ³ ; smoke and dust<50mg/m ³ 國家標準: SO ₂ <800mg/m ³ ; NO _x <800mg/m ³ ;
Sewage 污水	 Sewage is recycled after treatment through the sewage treatment and collection system and the efficiency of purification is enhanced by the use of filter presses, water purifier and a water agent, thereby improving the water recycling utilisation rate. 通過污水處理收集系統對污水處理 後循環回用,另加裝壓濾機、淨水 器,使用水劑等提升淨化效率,繼 而提高水循環利用率 Unusable production sewage, rainwater and domestic sewage are discharged after being treated by sedimentation, filtration or septic tank treatment 無法利用的生產廢水、雨水及生活 污水經沉澱/過濾/化糞池處理後 排放 	Engage qualified third party to carry out quarterly inspection 委託合資質的第三方每季度進行監測	Integrated Wastewater Discharge Standard (GB8978-1996) 《污水綜合排放標準(GB8978-1996)》

Pollutant 污染物	· · · · · · · · · · · · · ·	Monitoring method 監測方法	Applicable standard 適用標準
Noise 噪聲	 Plant noise insulation 廠房隔聲 Dust removal fan is equipped with sound insulation cover and basic shock absorption 除塵風機裝配隔聲罩和進行基礎減 震 	Engage qualified third party to carry out yearly inspection 委託合資質的第三方每年進行監測	Emission Standard for Industrial Enterprises Noise at Boundary (GB1234 2008) 《工業企業廠界噪聲排放標(GB12348- 2008)》
Solid waste 固體廢物	 Building waste: manufacturer recycling 建築廢料:廠商回收 Dust and sludge: engage qualified agencies to handle 粉塵、污泥:委託有資質單位處理 Waste shattered glass: reuse in production 廢碎玻璃: 回用於生產 Discarded packaging materials: recycle/discharge in legal ways 廢包裝材料: 回收循環利用/採取 合法途徑處理 Hazardous waste: engage qualified agencies to handle 危險廢物: 委託有資質單位處理 	The non-hazardous solid wastes are stored in designated locations before treatment. The relevant departments are responsible for the statistics while the material control team is responsible for the supervision. 無害固體廢物在處理前分類別存放於指 定地點,由相關部門負責統計及物控組 負責監督 The material control team is responsible for supervising the disposal and management of hazardous solid waste. 由物控組負責督查危險固廢處置和管理 工作	Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste 《中華人民共和國固體廢物污染環境防治 法》 National Catalogue of Hazardous Waste 《國家危險廢物名錄》 Standard for Pollution Control on Hazardous Waste Storage (GB18597- 2001) 《危險廢物貯存污染控制標準(GB18597- 2001)》 Management Measures for Hazardous Wastes Movement 《危險廢物轉移聯單管理辦法》

The Group has also invested in solar farms, which provide renewable energy each year to help reduce carbon emission and offset carbon emissions from solar glass production, contributing to the mitigation of global warming and actively fulfilling corporate responsibility. As of 31 December 2019, the Group's accumulated fixed asset investment in solar farms exceeded HK\$12.6 billion. During the Reporting Period, the Group continued to maintain negative carbon emissions, and the coverage ratio of the emission reduction of solar farms, compared to the carbon emission of solar glass production was 111%.

本集團亦有投資太陽能發電場,每年提供 的可再生能源電力有助減少碳排放量,抵 消太陽能玻璃生產產生的碳排放量,為減 緩全球氣候暖化出力,主動履行企業責 任。截至2019年12月31日,本集團在 太陽能發電場方面的累計固定資產投資 已超過126億港元。報告期內,本集團繼 續維持負碳排放,太陽能發電場的減排量 對比太陽能玻璃生產的碳排放量覆蓋率為 111%。

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Energy Management

Heavy oil and natural gas are the two mostly used fuels in solar glass production, but natural gas generates relatively less CO, in the process of burning and is a pure and environmentally friendly clean energy. Therefore, to reduce pollutant emissions 源。因此,為實現源頭降低污染物排放, at source, the Group chooses natural gas as its main production fuel.

The Group's direct energy consumption is mainly from natural gas as fuel for solar glass production, followed by diesel used for forklifts and gasoline used for vehicles. During the Reporting Period, the Group further reduced the 告期內主要通過新增產能、窰爐的節能改 average energy consumption intensity of its products mainly 造、現有產線的改造升級及生產工藝的持 through the addition of new production capacity, energysaving renovation of furnaces, transformation and upgrading 度。報告期內,清潔能源及可再生能源消 of existing production lines and continuous optimisation 耗量佔直接能源消耗總量的99.89%。 of production process. During the Reporting Period, the consumption of clean energy and renewable energy accounted for 99.89% of the total direct energy consumption.

The Group's indirect energy consumption is mainly from 本集團間接能源消耗主要來自外購電力, purchased electricity, which is mainly used in the processes 主要用於加工、堆垛、運輸、上片等工 of processing, stacking, transportation and loading. During the Reporting Period, the Group continued to optimise operation process and improve the level of automation to reduce the intensity of electricity consumption. In addition, the Group maintains and renovates residual heat power 效率,另亦於廠房屋頂安裝太陽能發電系 generation equipment from time to time, which enables it to maintain a stable and high power generation efficiency. It 中的比例。年內,餘熱發電量佔本集團太 also installs solar power generation system on the rooftops 陽能玻璃生產總用電量約16%,太陽能 of its plants to increase the proportion of renewable energy in the Group's total electricity consumption. During the Year, residual heat power generation accounted for approximately 16% of the total electricity consumption of the Group's solar glass production, while solar power generation accounted for approximately 11%.

能源管理

重油及天然氣為太陽能玻璃生產中最常用 的兩種燃料,但天然氣在燃燒時產生的二 氧化碳相對較少,為潔淨、環保的清潔能 本集團選擇天然氣作為主要的生產燃料。

本集團直接能源消耗主要來自於作為太陽 能玻璃生產燃料的天然氣,其次為叉車使 用的柴油及汽車使用的汽油。本集團於報 續優化,進一步降低產品的平均能耗密

序。報告期內,本集團繼續優化工藝流 程,提升自動化水平,以為降低電力耗用 密度。此外,本集團亦不時維護及改造餘 熱發電設備,令其維持穩定、較高的發電 統,以提高可再生能源於本集團總用電量 發電量則佔約11%。

Energy Consumption and Distribution of Xinyi Solar in 2019 2019年信義光能能源消耗量及分佈



Notes:

- (1) According to the Appendix II: Reporting Guida Environmental KPIs of the ESG Reporting Guide issue Hong Kong Stock Exchange in March 2020, the Group the accounting method for the total direct energy cons in 2019. The data in 2019 included the energy g internally by the equipment owned/controlled by the G the electricity generated by the residual heat facilities electricity generated by the rooftop solar system), while direct energy consumption disclosed in the 2018 ESG R not include such relevant data
- (2) Indirect energy consumption refers to the indirect energy purchased and consumed by the Group from external sources (i.e. purchased electricity).

附註

ance on	(1)	按照香港聯交所2020年3月發佈的《環
ed by the		境、社會及管治匯報指南》中《附錄二:
adjusted		環境關鍵績效指標匯報指引》的建議,本
sumption		集團就2019年直接能源消耗總量的核算
generated		方式進行調整,2019年的數據中包含了
iroup (i.e.		本集團擁有/控制的設備內部產生的能
s and the		源(即餘熱設施所發電力及屋頂太陽能系
e the total		統所發電力),而2018年ESG報告中披
Report did		露的直接能源消耗總量中未包含相關數
		據。
t energy	(2)	間接能源消耗指來自本集團從外部購買

及耗用的間接能源(即外購電力)。

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During the Reporting Period, the total direct and indirect energy consumption of the Group increased, mainly due to the year-on-year increase of 21.7% in the sales volume of the Group's solar glass. However, due to the active energysaving measures and the vigorous promotion of the application of clean energy and renewable energy, the Group's energy structure was further optimised during the Year. As such, the energy consumption intensity of finished products decreased by 3.4% year-on-year to 21.87 kWh/m².

Greenhouse Gases Emission and Exhaust **Gases Management**

The air pollutants generated during the production process of solar glass mainly include particulates produced during raw material feeding and mixing; SO,, NO and particulates 物;原材料熔化時因消耗天然氣、電力及 produced from the consumption of natural gas, electricity and water when raw materials are melted. Greenhouse gases emissions produced directly from natural gas combustion and raw material decomposition and indirectly from purchased electricity.

報告期內,本集團的直接及間接能源消耗 總量均有所增加,主要由於本集團太陽能 玻璃銷量按年增加21.7%。但由於採取了 積極的節能措施,以及大力推動清潔能源 和可再生能源的應用,本集團於年內的能 源結構進一步優化,產成品能源消耗密度 同比下降3.4%至21.87千瓦時/平方米。

溫室氣體排放及廢氣管理

太陽能玻璃生產過程中產生的大氣污染物 主要包括原材料上料、混合時產生的顆粒 水資源產生的SO,、NO,和顆粒物。温室 氣體排放主要包含由天然氣燃燒和原材料 分解產生的直接排放和由外購電力形成的 間接排放。



In respect of the major air pollutants and greenhouse gases generated in the production of solar glass, the Group continued to use natural gas (a clean energy), as the main fuel for production, and reduced the comprehensive energy consumption per unit of product through optimizing the production process during the Reporting Period. In addition to reducing emissions at source, the Group also further improved the efficiency of environmental protection equipment and the treatment capacity of pollutants through measures such as upgrading environmental protection equipment and optimizing the desulfurisation and denitrification process. so as to effectively reduce pollutant emission concentration. The air emission limits of the Group's production bases in Wuhu, Anhui and Tianjin are in compliance with the China's national standard - Emission Standard of Air Pollutants for Flat Glass Industry (GB26453-2011) (《平板玻璃工業大氣污染 物排放標準 (GB26453-2011) 》) and the more stringent local standards in Anhui and Tianjin, while the Malaysia production base is in compliance with the relevant standards set by the Environmental Quality Act 1974 on the emission of exhaust gases from glass furnaces. In compliance with the requirements of the environmental protection department, all of the Group's solar glass furnaces exhaust systems are installed with an online monitoring system for air emissions and are linked to the monitoring system of the environmental protection department for real-time monitoring.

The Group has satisfied part of its electricity demand by using residual heat power generation and installing distributed solar power generation system on the factory rooftop to reduce the amount of purchased electricity, thereby reducing the indirect greenhouse gases emission.



針對太陽能玻璃生產中產生的主要大氣污 染物及溫室氣體,本集團於報告期內除繼 續使用清潔能源天然氣作為主要生產燃 料,並透過優化生產工藝降低單位產品綜 合能耗。除從源頭降低排放外,本集團還 通過升級環保設備及優化脱硫脱硝工藝 等措施進一步提高環保設備的效率及對 污染物的處理能力,有效降低污染物排 放濃度。本集團於安徽蕪湖及天津的生 產基地的大氣排放物限值執行中國國家 標準《平板玻璃工業大氣污染物排放標準 (GB26453-2011)》及安徽省、天津市當地 更嚴格的地方標準,而馬來西亞生產基地 則執行《1974年環境素質法》對玻璃窰爐 廢氣排放設定的相關標準。遵循環保部門 的要求,本集團所有太陽能玻璃窰爐排煙 系統均安裝了大氣排放物在線監測系統, 並已與環保部門的監測系統連接,接受實 時監管。

本集團通過使用餘熱發電及於工廠屋頂安 裝分佈式太陽能發電系統滿足部分電力需 求,以減少外購電量,從而降低間接溫室 氣體排放量

ABOUT US COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道 UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永績發展 GENUINE ('XIN'CHENG) COOPERATION A GROW TOGETHER HAND IN HAND 「信」誠合作, 攜手共同成長 LEVERAGE ON ('XIN'ZHONG) TALE IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理



- (1) Direct emission refers to the greenhouse gases emission directly generated from the consumption of fuel (natural gas) and decomposition of raw materials in the glass production process by the solar glass furnace, which is calculated in accordance with the Accounting Methods and Reporting Guide on Greenhouse Gases Emission of Enterprises Producing Flat Glass in China (《中 國平板玻璃生產企業溫室氣體排放核算方法與報告指南》);
- (2) Indirect emission refers to the greenhouse gases emission generated by the Group's consumption of electricity purchased externally, which is calculated in accordance with the formula suggested in the Accounting Methods and Reporting Guide on Greenhouse Gases Emission of Enterprises Producing Flat Glass in China (《中國平板玻璃生產企業溫室氣體排放核算方法與報告指 南》);
- (3) Total greenhouse gas emission refers to the sum of direct (3) emission and indirect emission, without excluding the greenhouse gas offset by the effect of newly planted trees of the Group during the Reporting Period;
- (4) Since 2019, the Group has adjusted the calculation basis of the intensity of pollutant/waste emission and resources consumption from tonnes of finished products to per square metre of finished products, mainly due to the fact that the Group has gradually enriched the specifications of mainstream products and the sales of solar glass are also priced in square metres. Therefore, square metre is more appropriate as the calculation basis of pollutant/ waste emission intensity and resource consumption intensity;
- (5) Particulates are the flue gas released in the production process of (5) solar glass.

- (1) 直接排放是指直接由太陽能玻璃窰爐因 生產玻璃過程中消耗燃料(天然氣)及原 材料分解而產生的溫室氣體排放,乃根 據《中國平板玻璃生產企業溫室氣體排放 核算方法與報告指南》計算得出;
- (2) 間接排放是由本集團消耗從外部購買的 電力產生的溫室氣體排放,根據《中國平 板玻璃生產企業溫室氣體排放核算方法 與報告指南》建議的公式進行計算;
- 溫室氣體總排放量為直接排放量與間接 排放量相加後的總值,未扣減本集團 於報告期內新種植樹木的溫室氣體減除 量;
- 2019年起,本集團調整污染物/廢棄物 排放密度及資源耗用密度的計算基準, 由按生產產成品的噸數轉為使用按生產 產成品的每平方米數,主要由於本集 團目前逐步豐富主流產品的規格,加上 太陽能玻璃銷售亦是以平方米計價,故 以平方米數作為污染物/廢棄物排放密 度,及資源耗用密度的計算基準更為合 適;

顆粒物為太陽能玻璃生產過程中窰爐排 出的煙氣。 In 2019, the total emission of particulates, SO_2 , NO_x and greenhouse gases of the Group increased, mainly due to the increase in the production volume of products. During the Reporting Period, the emission of air pollutants from all solar glass furnaces of the Group were in compliance with national and local emission standards, some of which were better than the relevant standards, reaching a ultra-low emission level, with the greenhouse gases emission intensity further decreased to 7.82 kilograms of CO_2 equivalent.

Water Resources and Sewage Management

Water is consumed in the raw material mixing, equipment cooling and residual heat power generation, and the polishing and washing processes in the tempering procedures during the production of solar glass. To make good use of water resources, the Group has upgraded its water recycling system by increasing water output of the system and using recycled water for production whenever possible, so as to reduce the consumption of fresh water. In addition, water consumption is reduced by optimizing the process of certain procedures. During the Reporting Period, our Wuhu production base reduced water consumption by over 7% by strengthening the recycling of water resources. Although the total water consumption of the Group during the Year increased due to the increase in production volume, the water intensity per square metre of finished products decreased by 13.7% yearon-year to 0.02 cubic metres.



2019年,本集團顆粒物、二氧化硫、氮 氧化物以及溫室氣體的排放總量均有所增 加,主要由於產品生產量上升。報告期 內,本集團所有太陽能玻璃窰爐的大氣污 染物排放均符合國家及地方排放標準,部 分優於相關標準達至超低排放水平,溫室 氣體排放密度則進一步下降至7.82千克 二氧化碳當量。

ent 水資源及廢水管理

太陽能玻璃生產中原料混合、設備冷卻、 餘熱發電,以及鋼化加工時的洗磨及清洗 工序都需耗用水資源。為善用水資源,本 集團通過升級水循環系統,增加系統的產 水量並盡可能使用循環水進行生產,以減 少新水取用量。此外,通過優化部分工序 的工藝,以降低用水量。報告期內,蕪湖 生產基地通過加強對水資源的循環利用, 取水量下降逾7%。儘管本集團年內總用 水量因產量提升而有所增加,但每平方 米產成品的用水密度同比減少13.7%至 0.02 立方米。

ABOUT US COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道 UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永績發展 GENUINE ('XIN'CHENG) COOPERATION GROW TOGETHER HAND IN HAND 「信」試合作,攜手共同成長 LEVERAGE ON ('XIN'ZHONG) TALE IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

Water Consumption of Xinyi Solar in 2019 2019年信義光能生產程序用水量



- Total water consumption = water consumption for production use + water consumption for domestic use, which is calculated in accordance with the Appendix II: Reporting Guide on Environmental KPIs of the ESG Reporting Guide issued by the Hong Kong Stock Exchange in March 2020;
- (2) Water consumption for production use is calculated based on the amount of fresh water consumed in production, excluding the amount of reused water;
- (3) Water consumption for domestic use refers to the amount of (3) water consumed stated on the water bills in the living area, and is allocated in proportion to the number of employees in the living area.
- (1) 總用水量=生產用水量+生活用水量, 乃根據按照香港聯交所2020年3月發佈 的《環境、社會及管治匯報指南》中《附錄 二:環境關鍵績效指標匯報指引》進行數 據統計:
- (2) 生產用水量按生產中耗用的新水取用量 進行計算,不包括重複利用水量;
- (3) 生活用水量是根據生活區域水費賬單的 用量,並按照生活區域內員工人數比例 分攤後得出。



By strengthening the management of the water recycling system, such as improving the performance, efficiency and utilisation of certain equipment, water quality after systematic treatment can be improved so that it can be fully utilised in different production processes. During the Reporting Period, over 95% of the Group's total water consumption for solar glass production was from recycled water. For the production sewage and domestic sewage that cannot be recycled, they are collected and transported to the urban sewage treatment plant for treatment via designated pipelines. During the Year, Malaysia has upgraded and optimised its water recycling system, which significantly enhanced the sewage treatment capacity of such system, with sewage treatment volume increased by 63.5% year-on-year. During the Reporting Period, regarding the major monitoring indicators for sewage discharge, including pH value (pH), chemical oxygen demand (COD_c), biological oxygen demand (BOD_c), ammonia nitrogen, animal and vegetable oil, etc., our Wuhu and Tianjin production bases complied with the requirements of the Integrated Sewage Discharge Standard (GB8978-1996) (污水綜合排放標 準 (GB8978-1996) 》) of the PRC and the level three standard of the Integrated Sewage Discharge Standard (DB12356-2018) (《污水綜合排放標準(DB12356-2018)》) of Tianjin, respectively. The Malaysia production base implemented the A standard of Environmental Quality (Industrial Effluents) Regulations 2009 and engaged a qualified third-party institution to perform quarterly sample checks on the sewage discharged to ensure that the major monitoring indicators met the standard. The Wuhu industrial park has installed an online real-time monitoring system for sewage discharge, and we has also planned to install an online real-time monitoring system in Malaysia in the future.

In addition to implementing effective water management and taking actions to conserve water and reduce emissions, the Group also pays close attention to the risk in relation to water resources in the places where it operates. According to the assessment on the water resources pressure of the Group's three major production bases set out in the "Aqueduct Water Risk Atlas" published by the World Resources Institute, 93.6% of the Group's production capacity is located in medium to low risk areas of water resources.

eal-time has also stem in ent and 除了進行 ons, the 用水減; co water 所在地 to the 究所的 Group's Water t Water 水源壓 , 93.6% 能位於;

通過加強水循環系統的管理,如提高部分 設備的性能、效率及加大使用量,提升經 系統處理後的水質量,以令其可於不同的 生產流程中獲得充分利用。報告期內, 本集團太陽能玻璃生產總水耗量中有超 過95%來自於重複用水。對於無法再循 環利用的生產污水及生活污水,集中回收 後經指定管道輸送至城市污水處理廠進行 處理。馬來西亞於年內對水循環系統進行 了改造及優化,顯著提升系統的污水處理 能力,污水處理量同比增長63.5%。報 告期內,針對污水排放的主要監測指標。 包括酸鹼值(pH)、化學需氧量(COD_)、 生物需氧量(BOD_)、氨氮、動植物油等, 蕪湖及天津生產基地的分別符合中國《污 水綜合排放標準(GB8978-1996)》和天津 市《污水綜合排放標準(DB12356-2018)》 三級標準的要求,而馬來西亞生產基地 則執行 Environmental Quality(Industrial Effluents) Regulations 2009的A標準, 並外聘具有資質的第三方機構對外排的污 水進行季度抽檢,確保主要監測指標均達 標。蕪湖工業園已安裝污水排放線上實時 監測系統,馬來西亞亦計劃於未來安裝在 線實時監測系統。

除了進行有效的水資源管理及行動,節約 用水減少排放外,本集團亦密切關注業務 所在地的水資源風險。根據世界資源研 究所的「輸水道水源風險地圖」(Aqueduct Water Risk Atlas)對本集團三大生產基地 水源壓力的評估,本集團有93.6%的產 能位於水資源中至低風險的地區。

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信 |助綠能, 實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

「信」重英才,完善人才管理

Wastes Management

關於我們

The hazardous wastes generated from the production of solar glass mainly include discarded reagent bottles, discarded 主要包括廢試劑瓶、廢包裝桶、廢燈管、 packaging barrels, discarded fluorescent tubes and discarded mineral oil. In accordance with the requirements of the Law 環境防治法》的要求,制定危險廢物管理 on the Prevention and Control of Environmental Pollution 計劃並向業務經營所在地環境保護行政主 by Solid Waste (《固體廢物污染環境防治法》), the Group has formulated hazardous waste management plans and filed them with the environmental protection administrative authorities 其儲存、利用及處置等程序均符合法律法 in the places where it operates. Hazardous waste is classified 規的要求,並設法減少危險廢物的產生 and properly managed according to the hazardous waste management plans to ensure that its storage, utilisation and 《危險廢物貯存污染控制標準(GB18597disposal procedures are in compliance with the requirements of 2001)》及《危險廢物轉移聯單管理辦法》的 laws and regulations. The Group seeks to reduce the amount of hazardous waste produced and its hazardous nature. During the Reporting Period, in compliance with the requirements of the Standard for Pollution Control on Hazardous Waste Storage (GB18597-2001) (《危險廢物貯存污染控制標準 (GB18597-2001) ») and the Management Measures for Hazardous Wastes Movement (《危險廢物轉移聯單管理辦法》), the Group engaged gualified units to dispose of hazardous wastes and reported in a timely manner through the online management system as required by the regulatory authorities to facilitate the regulation by relevant departments.

Other non-hazardous solid wastes generated from the production of solar glass mainly include construction waste, shattered glass, discarded packaging materials, dust and sludge collected by environmental protection facilities (such as dust removal facilities and sewage treatment facilities). For non- 以重複利用的無害固體廢棄物,本集團委 hazardous solid wastes that can be reused, the Group engages 託回收公司進行回收,循環利用。對於不 recycling companies for recycling. For non-hazardous solid 可循環利用的無害固體廢棄物,本集團則 wastes that cannot be recycled, the Group entrusts qualified agencies for handling in accordance with the procedures 處置。 stipulated by laws.

廢棄物管理

太陽能玻璃生產過程中產生的危險廢棄物 廢礦物油等。本集團依照《固體廢物污染 管部門進行備案。依據危險廢物管理計劃 對危險廢物進行分類及妥善的管理,確保 量和降低其危害性。於報告期內,遵循 要求,本集團委託有資質的單位進行危險 廢棄物的處置,並按照監管部門的要求在 線上管理系統及時申報,以便相關部門進 行規管。

太陽能玻璃生產中產生的其他無害固體廢 棄物主要包括建築廢料、碎玻璃、廢包裝 材料、環保設施(如除塵設施、污水處理 設施等)收集到的粉塵和淤泥等。對於可 會委託有資質單位依照法律規定程序進行

Hazardous and Non-hazardous Wastes Data of Xinyi Solar in 2019 2019年信義光能有害及無害廢棄物數據



During the Year, the increase in total hazardous and nonhazardous wastes from the production process was mainly due to the increase in production volume brought by new or resumed production capacity. Benefitting from effective measures to reduce waste at source, the intensity of hazardous wastes of the Group decreased slightly year-on-year during the Reporting Period. The slight increase in the intensity of non-hazardous waste was mainly attributable to the new and resumed production capacity of the Group during the Year, which was relatively high in the early stage of production.



年內,來自生產過程的有害及無害廢棄物 總量增長主要由於新增或復產產能帶來的 產量增長。得益於有效的源頭減廢措施。 本集團於報告期內有害廢棄物密度同比略 有下降。無害廢棄物密度略有上升主因本 集團年內有新增及復產產能,產能運行初 期此項指數相對較高。

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信 |助綠能, 實現永續發展

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「信」重英才,完善人才管理

In terms of reducing the waste of product packaging, traditional packaging requires a large amount of wood and paper and it is difficult to reuse wood after transportation, therefore, the Group actively promotes the eco-friendly packaging of "replacing wooden pallets with iron pallets" to 時採用更環保的方式確保付運產品的防潮 customers, and adopts a more environmental-friendly approach 防霉效果,建議客戶採納無紙化包裝,實 to ensure the moisture-proof and mildew-proof effects of the products delivered, and recommends customers to adopt paperless packaging to achieve waste reduction at source. In addition, in order to reduce the generation of office waste, the Group gradually achieved paperless office through the promotion of OA system, and strengthened the environmental awareness of employees through training and publicity, such as advocating the recycling of office supplies.

在產品包裝的減廢方面,傳統的包裝需使 用大量的木材和紙張,而木材於運送後較 難重複使用,故本集團向客戶積極推廣 「以鐵托盤代替木托盤」的環保包裝,同 現源頭減廢。此外,為減少辦公垃圾的產 生,本集團通過OA系統的推廣,逐步實 現無紙化辦公,並通過培訓和宣傳加強員 工的環保意識,例如倡導辦公用品的循環 利用等。

Climate Risks and Opportunities

In the Global Risk Report 2019, 14th Edition issued by the World Economic Forum ("WEF"), the top three global risks by likelihood in 2019 were all environmental risks, namely extreme weather events, climate action failure and natural disasters in ascending order. According to the Global Risk Report 2020, 15th Edition recently issued by WEF, concerns about environmental risks have been rising over the last decade. In the global risks outlook for the next 10 years, environmental threats dominate the top five long-term risks by likelihood and occupy three of the top five spots by impact, of which extreme weather events are the highest risk by likelihood and climate action failure is the biggest risk by impact.



To better manage and adapt to the risks and potential opportunities brought by climate change to business development and to secure sustainable development, the Group has made reference to the recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD") to disclose. for the first time, the major climate risks that have occurred or may occur and have a high correlation with the Group's business, and our responding strategies and actions.

Benefitting from the active promotion of eco-friendly packaging and the support from more customers, during the Reporting Period, the Group's total consumption of packaging material and intensity of packaging material for finished products recorded a significant year-on-year decrease of over 20% and 30%。報告期內,本集團全部生產基地 30%, respectively. During the Reporting Period, the utilisation 鐵托盤使用率超過50%, 部分達80%以 rate of iron pallets in all production bases of the Group exceeded 50%, with some reaching over 80%, resulting in a 减少48.2%。 year-on-year decrease of 48.2% in the utilisation of wood, wood strips and wooden pallets.

得益於積極推廣環保包裝及獲得更多客戶 的支持,本集團於報告期內產成品包裝 材料總使用量及包裝材料使用密度同比 均錄得顯著下降,降幅分別超過20%和 上,令木材、木條及木托盤的使用量同比



氣候風險與機遇

世界經濟論壇(World Economic Forum, 「WEF」)於《2019全球風險報告》(The Global Risks Report 2019, 14th Edition) 中評估2019年主要全球風險中,首三位 均為環境風險,依次為極端天氣、氣候問 題應對失效、自然災害。在 WEF 最新發佈 的《2020 全球風險報告》(The Global Risks Report 2020, 15th Edition)中指出,過 去10年中,人們對於環境風險擔憂持續 上升,在對未來10年的全球性風險展望 中,環境風險佔據發生可能性最高的長期 風險首五位,並且在影響力最大的長期風 險中,環境風險佔據了三席,其中極端天 氣為發生可能性最高的風險,而氣候問題 應對失效為影響力最大的風險。

為更好地管理及適應氣候變化對業務發展 帶來的風險及潛在機遇,保障可持續發 展,本集團參考氣候相關財務資訊披露 工作小組(Task Force on Climate-related Finance Disclosures,「TCFD」)的建議, 首次就已經或可能發生、與本集團業務存 在較高相關性的主要氣候風險,及應對策 略與行動作出披露。

Risks

風險

Extreme weather

極端天氣

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

Relationships/potential relationships to

Typhoon may cause damage to the

business/development

(i)

與業務/發展的關聯/潛在關聯

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永績發展

Responding strategies and actions

(i) With reference to the historical data, the Group

應對策略與行動

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

Relationships/potential relationships to Risks business/development 風險 與業務/發展的關聯/潛在關聯



(iv) Extreme weather such as typhoon and heavy rainfall may affect the construction progress of solar farm projects and construction safety 極端天氣如颱風、強降雨等可能會影響 陽能發電場項目施工進度及施工安全

,	
modules, which in turn may lead to the	has comprehensively assessed the probability of
failure of the solar farm or affect power	the occurrence and the impact of climate risks
generation efficiency;	and taken full account of the risk of extreme
颱風可能會導致組件損壞繼而導致太陽能	weather for design, and adopted the modules
發電場發生故障或影響發電效率;	and auxiliary materials with higher protection
	performance to improve the wind resistance
	capability of solar farm projects. Centralised 24-
	hour remote monitoring has been carried out via
	the electronic monitoring platform to effectively
	identify and timely handle abnormalities;
	參考歷史數據綜合評估氣候風險發生概率及影響
	度,充分考慮極端天氣風險進行設計,採用更高保
	護性能的組件及輔材,提高太陽能發電場項目的抗
	風能力。通過電子監控平台進行集中式、24小時的

- (ii) Abnormal rainy weather may affect the (ii) output of power generation from solar farm, thereby affecting its revenue; 異常的陰雨天氣會影響太陽能發電場發電 量,繼而影響其收益;
- (iii) Extreme weather may result in transportation disruptions, which in turn may affect the supply of raw materials and product delivery; 極端天氣可能導致運輸受阻,繼而影響原 材料供應及產品出貨;

Power generation efficiency of solar farm projects has been improved through efficient operation and maintenance to offset certain impact brought by extreme weather; 透過高效運維提升太陽能發電場項目的發電效益, 以抵消部分極端天氣帶來的影響;

遠程監控,有效識別異常情況以作出及時處理;

(iii) The Group controls and reasonably adjusts the inventory level of raw materials to a secure level through the Group's procurement centre, so as to ensure the stable supply of important raw materials necessary for production, without being affected by short-term extreme weather or transportation conditions. In addition, by enhancing the integrated transportation capacity of water transportation and land transportation (such as self-owned terminals or nearby local import and export ports, fleet management and optimisation), the Group ensures the transportation of raw materials and products delivery; 通過集團採購中心把控原材料庫存水平,合理調整 安全庫存量,確保生產必須的重要原材料供應穩 定,不受短期極端天氣或其造成的運輸情況影響。 此外,通過提升水運、陸運綜合運輸能力,如自有 碼頭或鄰近當地進出口港、車隊管理與優化等,保 障原材料運輸及產品出貨;



長期氣候變化

(i)

High-temperature operations are pror to heat stroke events; 高溫作業易發生中暑事件;

(ii) Water shortage in regional water resources system may result in the inability to supply water required for production 區域水資源系統發生供水短缺可能導致 法供應生產所需用水

Responding strategies and actions 應對策略與行動

太	(iv)	The Group has enhanced the safety awareness of construction workers in implementing safety construction technical specifications and operating procedures through training, strengthened construction quality and safety risk control and emergency response in extreme weather conditions to continuously improve the Group's safety and risk control capabilities, and formulated and implemented safety support plans to ensure "safety first". The Group has its own EPC team, and therefore the construction quality and progress control of solar farm projects are less risky and more controllable than outsourcing to third party teams.
		通過培訓提升施工人員執行安全施工技術規範和操 作規程的安全意識,加強極端天氣條件下施工質量 安全風險管控和應急處置工作以持續提升本集團的 安全風控能力,制定及落實安全支護方案,確保「安 全第一」。本集團擁有自己的EPC團隊,故於太陽能 發電場項目建設質量及進度把控方面較外包予第三 方團隊風險更低且可控。
ne	(i)	Cooling measures have been formulated for high- temperature weather, including adjustment on operation arrangements, control of operation hours, provision of heatstroke prevention items and drugs; 針對高溫天氣制定防暑降溫措施,包括調整作業安 排、控制作業時間、配備防暑降溫物品和藥品;
[無	(ii)	Water recycling system has been continuously optimised, strengthening the utilisation of recycled water and reducing the amount of fresh water consumption.

持續優化水循環系統,加強循環水的使用,降低取 水量。

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永續發展

「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO 「信」重英才,完善人才管理

Risks 風險



(j)

Relationships/potential relationships to business/development 與業務/發展的關聯/潛在關聯

Responding strategies and actions 應對策略與行動

(i)

Implement rigorous regulatory policies, strictly control, or even suspend the approval of new production capacity of high resources/energy consumption industries. The potential impact of which includes the increase in environmental protection costs due to the increase in the difficulty of environmental protection performance standards, the interruption of new production capacity expansion or the existence of uncertainties affecting the realisation of production capacity expansion plans; **實施更為嚴厲的監管政策,嚴控甚至停止**

對資源/能源高耗型產業新產能的審批, 潛在影響包括環保績效標準難度提升導致 環保成本提升、新產能擴張受阻或存在不 明朗因素影響產能擴張計劃的實現;

The strengthening of air pollution (ii) control policies and the implementation of new energy-saving and carbon reduction policies may increase the future potential cost on environmental protection; 針對大氣污染治理政策力度的加強,以及 新的節能減碳政策的施行將令後續潛在環 保成本提升;

Adhering to green production and continuous optimisation of production technology, unit emission and energy consumption has been improving continuously under the control by local environmental protection department to ensure that the indicators meet and exceed the relevant standards. Low-carbon clean energy has been adopted in production, the proportion of solar power generation and residual heat power generation has been increased, achieving waste reduction at source. The Group is accredited with the certification of ISO14001 environmental management system, and all production bases currently in operation are green projects certified by the HKQAA for green finance. In addition, the Group owns overseas production base, has capability to expand overseas production capacity and actively seeks suitable overseas opportunities; 堅持綠色生產及持續優化生產技術,令單位排放量 及能源耗用量持續改善,接受當地環保部門的管 控,確保指標滿足及優於相關標準。採用低碳的清 潔能源進行生產、提高太陽能發電及餘熱發電供電 佔比,實現源頭減廢。本集團通過ISO14001環境管 理體系認證,目前在營運中的所有生產基地均屬於 香港品質保證局綠色金融認證的綠色項目。此外, 本集團擁有海外生產基地,具備海外擴產能力並積 極尋求合適的海外機會;

(ii) Through green production and investment in renewable energy projects, the Group's environmental protection efficiency maintains a leading position in the industry during the past operating period. In the future, the Group will continue to improve and meet higher standards, and contribute to the achievement of the United Nations Climate Action Plan (SDG13) by increasing the scale of renewable energy investment; 透過綠色生產及對可再生能源項目的投資,本集團 的環保效益在過往經營期間均處於行業領先水平, 未來亦會持續優化提升滿足更高的標準,並透過提 高可再生能源投資規模以為聯合國氣候行動目標 (SDG 13)的達成作貢獻;

Risks 風險



Relationships/potential relationships to business/development 與業務/發展的關聯/潛在關聯







Climate change increases the urgency of renewable energy applications, while the enhancement of market competitiveness of solar power generation shall be achieved through cost reduction and efficiency enhancement. As such, the pursuit of more efficient solar power technology with cost advantages across the industry chain may lea to changes in the demand for glass products including the amount and product types 氣候變化提升加大可再生能源應用的急迫性。 升太陽能發電的市場競爭力需要通過降低成本 升效率達成,故產業鏈上下追求更高效且具備 本優勢的太陽能技術,會導致對玻璃產品的需 變化,包括需求量及產品類型



The Company actively expands overseas sales; however, overseas markets impose more stringent environmental protection requirements on the production, manageme and products of enterprises 公司積極拓展海外銷售,而海外市場對企業生 產、管理及產品的環保要求更為嚴苛

Responding strategies and actions 應對策略與行動

(iii)	The Group has been expanding global
	procurement channels and scale to balance
	domestic supply risks. In addition, the Group has
	been actively enhancing its self-supplied resources
	reserve. The first self-owned ultra-clear silica sand
	mine is expected to commence production in the
	third quarter of 2020, which may help improve
	the quality and stability of supply and reduce
	costs.
	擴大全球採購管道及規模,平衡國內供應風險。此
	外,本集團積極提升自供資源儲備,首個自有的超
	白硅沙礦預計於2020年第三季度投產,有助提高供
	應質量及穩定性,及降低成本。

	As a solar farm developer, the Group has a forward-
	looking estimation for downstream demands. As a
	leading enterprise in the industry, the Group has been
	actively promoting the research and development and
	quantitative production of new products, satisfying the
	needs of cost reduction and efficiency enhancement of
	the industrial chain. In the fourth quarter of 2019, the
ad	Group successfully commenced the mass production
S,	of 2.0 mm solar glass. Such product possesses the
	advantages in price and of high transmittance, which
提	help to reduce the cost of modules and improve power
提	generation efficiency.
i成	作為太陽能發電場開發商,本集團對下游終端需求具備前
求	瞻性視野。作為行業的領先企業,本集團積極推動能滿足
	產業鏈降本增效需求的新產品研發及量化生產。於2019年
	第四季度,本集團成功量產2.0mm太陽能玻璃,相關產品
	具價格及高透率等優勢,有助降低組件成本及提高發電效
	益。
	Following the standards of the ISO14001 environmental
	management system, the Group promotes green
	production and consistently reduces the pollution
nt	emission and energy consumption per unit. Therefore,
	our products meet international certification standards
	such as RoHS and REACH.
-	遵循 ISO14001 環境管理體系標準,推行綠色生產並持續減
	少單位污染排放量及能源耗用量,產品滿足RoHS、REACH
	等國際認證標準。

Risks

風險

Reputation risk

聲譽風險

關於我們 「信」奉守則,堅守管治之道

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GENUINE ('XIN'CHENG) COOPERATION AND **GROW TOGETHER HAND IN HAND** 「信 | 誠合作,攜手共同成長

「信」重英才,完善人才管理

GENUINE ('XIN'CHENG) COOPERATION AND GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

Long-term Customer Relationship

The Group accounts for over 30% of the global market share in solar glass industry. With the opening of the production base in Malaysia in 2016 and the capacity expansion in 2018, the Group's sales market has been further expanded. The Group attaches great importance to customer relationship management and is committed to providing customers with safe and high-quality products through rigorous quality control. Through close communication and timely understanding of customer needs, the Group proactively responses to product development, sales, after-sales and other aspects, and pays attention to the protection of customer information and privacy, with an aim to win customers' recognition and maintain long-term customer relationship through "wholehearted devotion, high quality and careful service".

Product quality and safety

Solar glass is mainly used in and plays a key protective role for solar modules as their cover and/or back panels. As there are specific limits on the degradation rate of solar panels over 25 years in the IEC and TüV standards, and the guality of the solar glass as a protective layer has a significant impact on maximizing the life of the cells in the module and minimizing the module degradation rate, therefore, the Group has formulated comprehensive policies and measures to ensure that its products meet the highest guality and industry standards.

With the expansion of the Group's sales territory, we have to meet the higher standards and requirements for product environmental protection of the countries along the Belt and Road (一帶一路) and in Europe, the United States and Southeast Asia. During the Reporting Period, the Group's overseas sales products were mainly provided by the production base in Malaysia, while some were provided by the production base in Wuhu. The products met the strict international certification standards such as RoHS and REACH.

與業務/發展的關聯/潛在關聯 As climate change increases the awareness and attention of various parties, such as customers, investors, fund providers, business partners, on the Company's environmental performance and adaptability to climate change, the provision and effective transmission of relevant information are crucial for enhancing the Group's governance level, risk control capability and brand recognition 氣候變化令至客戶、投資者、融資方、業務夥伴 等各界對企業的環保表現、氣候變化適應力關注 度及重視程度日益提升,因此相關資訊的提供及 有效傳達對提高各界對本集團的管治水平、風控 能力及品牌的認可度十分重要

Relationships/potential relationships to

business/development

Responding strategies and actions 應對策略與行動

The Group maintains long-term, effective and good communication with major stakeholders through different functional departments, timely responds to their relevant consultation and provides them with the Group's environmental performance indicators, responding actions to climate change and other relevant information as reference;

本集團通過不同職能部門與主要持份者保持長期、有效 良好的溝通,及時回應其相關諮詢並提供本集團環保績效 指標、氣候變化應對行動等相關資料作為參考;

The ESG Report is published annually to provide more comprehensive data and information on environmental protection-related areas; 每年發佈《ESG報告》,提供環保相關範疇更全面的數據及

資訊;

The Group has been implementing an international standardised management system and is subject to internal supervision and external regular inspection and certification 執行國際標準化管理體系,接受內部監管、外部定期檢測 認證。

The Group has incorporated the factor of climate change into its major governance processes and actively strengthened the regulatory and leadership role at the Board level. In the future, the Group will continue to effectively control and continuously reduce its impact on the atmospheric environment by actively adopting energy-saving and emission reduction measures for its solar glass production business, and at the same time increase the investment and application of renewable energy to ensure the sustainable operation of the Group.

本集團已將氣候變化融入主要管治過程, 並積極加強董事會層面的監管及領導角 色。未來,本集團仍將透過太陽能玻璃生 產業務上積極採取節能減排措施有效管控 及持續降低對大氣環境的影響,同時加大 可再生能源的投資及應用,以保障本集團 的可持續經營。

長久的客戶關係

於太陽能玻璃行業,本集團佔全球超過 30%的市場份額, 並隨著馬來西亞生產 基地於2016年的投入營運及於2018年的 產能擴張,本集團的銷售市場獲得進一步 拓展。本集團注重客戶關係管理,致力通 過嚴謹的品質管控為客戶提供安全優質的 產品,並透過緊密溝通及時瞭解客戶的需 求,從產品研發、銷售、售後等方面作出 積極回應,同時亦注重對客戶資料和隱私 的保護,務求以「全心的投入、用心的品 質、細心的服務|獲得客戶的認可,維持 長久的客戶關係。

產品質量與安全

太陽能玻璃主要應用在太陽能組件上,作 為其蓋板及/或背板, 起關鍵的保護作 用。由於IEC和TüV標準設有對太陽能組 件25年的衰減率的明確限制,而作為保 護層的太陽能玻璃的品質對最大化組件內 電池的使用壽命和最小化組件的衰減率具 有重大影響,因此,本集團制定了全面的 政策及措施,以確保產品符合最高品質及 行業標準。

由於集團全球銷售版圖的擴展,一帶一路 沿線國家、歐洲、美國、東南亞國家對產 品的環保有著更高的標準和要求。報告期 內,本集團海外銷售產品主要由馬來西亞 生產基地提供,部分亦由蕪湖生產基地供 給,產品滿足RoHS和REACH等嚴格的國 際認證標準。

關於我們

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GENUINE ('XIN'CHENG) COOPERATION AND GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO 「信」重英才,完善人才管理

In the three major production bases of the Group, we 本集團三大生產基地均嚴格遵守當地法律 produce and operate in strict compliance with local laws and regulations, and effectively supervise product quality, environmental management and production safety according OHSAS18001職業健康安全管理體系的標 to the standards and requirements of ISO9001 guality 準和要求對應產品質量、環境管理、生產 management system, ISO14001 environmental management 安全實施有效監管,以滿足全球客戶提出 system and OHSAS18001 occupational health and safety management system, in order to meet global customer demands for production management and corporate social responsibility management. During the Year, the Group was mainly engaged in the sales of deep-processed solar glass products, which had obtained the China Compulsory Certification (CCC). Our adherence to "international standards and world-class quality" has enabled the Group's products to develop reputation among customers. Our products have been recognised and used by large module manufacturers around the world.

During the Reporting Period, no products sold or shipped were recalled by the Group for safety or health reasons.

Quality control and after-sales service

The Group implements the ISO9001:2015 quality management 本集團執行ISO9001:2015 質量管理體系 system to supervise product quality. It has established an internal guality control system and continuously improved 監控體系並持續完善相關程序。報告期 relevant procedures. During the Reporting Period, the Group implemented control over the entire production process in accordance with the requirements of our Internal Quality Control Manual (《品質監控手冊》) to ensure that the products meet customers' quality standards and the requirements.

法規從事生產經營,並依照ISO9001質量 管理體系、ISO14001環境管理體系以及 的生產管理和企業社會責任管理相關的訴 求。年內,本集團以銷售深加工太陽能玻 璃產品為主,相關產品已獲中國國家強制 性產品認證(CCC)。對「國際標準、全球 品質」的堅持令本集團的產品贏得客戶的 一致口碑,獲得全球各大組件廠商的認可 和選用。

報告期內,本集團沒有因安全或健康理由 而須回收已出售或已付運的產品。

品質監控與售後服務

對產品質量進行監管,已建立內部的品質 內,本集團遵循集團內部《品質監控手冊》 要求對生產全過程實施管控,以確保產品 達標及滿足客戶的要求。



For the ungualified products that fail to pass the inspection, the Defective Products Management Procedures (《不合格品 管理程序》) will be implemented, and the QC department will supervise the disposal of such products to ensure that no ungualified product is mixed with the products to be delivered. On the basis of ensuring the quality of products, the Group has standardised the delivery process according to the requirements of our internal policies, and requires strict compliance with the delivery deadline. Through smooth communication between sales and production, storage and transportation departments, the Group ensures punctual delivery and protects the interests of customers.

Quality Control Process of Xinyi Solar

對於未能通過檢測的不合格品,執行《不 合格品管理程序》,由品管部負責監管相 關產品的處置,確保不達標不交付,防止 交付貨品中混有不達標產品的情況。在確 保產品品質的基礎上,本集團按內部制度 要求規範交付流程,嚴格遵守交貨期限, 通過銷售與生產、儲運等部門的暢順溝通 確保準時交付,保障客戶的利益。

ABOUT US COMPLIANCE ('XIN'FENG) WITH REGULATI 關於我們 UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之遺 UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永續發展

LEVERAGE ON ('XIN'ZHONG) TALEI IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

After the delivery of products, the quality control and aftersales service personnel will obtain customer's feedback on the products and services in a timely manner. The Group also focuses on improving the after-sales service level to achieve high customer satisfaction and maintain long-term customer trust. After receiving customers' feedback on product quality issues, the after-sales service personnel will make timely response according to our internal requirements. Claims for return of products will be handled as soon as possible within the prescribed term in strict accordance with internal procedures to ensure that the rights and interests of customers are not harmed. During the Year, the Group's proactive and responsible attitude, after-sales service and processing procedures continued to be recognised by customers, and the long-term cooperation between the two parties was further consolidated.

Information security and privacy protection

The internet plays a positive role in optimizing business management, improving work efficiency, maintaining customer communication and relationship, and even reducing resource waste. With the increasing dependence of internal management and business operation on internet, the Group has attached greater importance to the security of equipment, system, network and data transmission, and is committed to the continuous optimisation of the defense system through fine management, effective screening and elimination of security risks, in order to protect information security. The Group has established an information security-related management system and developed strict codes for key departments such as technology, research and development, production and sales departments. The person-in-charge of the relevant departments shall be the first responsible person for the information security of their departments. In addition, the Group has set up an information centre, with full-time staff responsible for the daily management and maintenance of the information system as well as regular optimisation and upgrading, so as to improve the security of the internal system and the sensitivity

產品交付後,由品管售後服務人員及時瞭 解客戶對產品及服務的反饋。本集團亦注 重提升售後服務的水平,以實現高客戶滿 意度及維繫客戶的長期信任。獲悉客戶對 產品品質問題的反饋後,售後服務人員遵 循內部要求及時作出回應,如涉及退還產 品的訴求,則嚴格依內部程序在規定期限 內盡快處理,以確保客戶的權益不受損 害。年內,本集團積極回應和主動負責的 態度、售後服務及處理程序持續獲得客戶 認可,雙方的長期合作關係得以進一步鞏 固。

信息安全與隱私保護

互聯網在優化企業管理、提升工作效率、 客戶溝通及關係維護,乃至減少資源浪費 方面均起到積極作用。但隨著內部管理及 業務營運對互聯網的依賴程度提升,本集 團對於設備、系統、網絡及數據傳遞的安 全日益重視,並致力通過精細化管理及對 防禦系統持續的優化,有效排查及消除安 全隱患,保障信息安全。本集團已建立信 息安全相關的管理制度,針對技術、研 發、生產、銷售等關鍵部門制定嚴格的守 則,並由相關部門負責人作該部門信息安 全的第一責任人。此外,本集團設立信息 中心,由專職人員負責信息系統日常的管 理維護以及定期的優化升級,提升集團內 部系統的安全性及對信息安全事件的靈敏 度。本集團信息系統採納權限分級管理,

to information security incidents. The information system of the Group adopts hierarchical authority management, and standardised monitoring is carried out on the use of the information system, software development and application, and data management according to the requirements of the internal system, in order to ensure that important data and information of the Group, customers and partners are fully secured.

The Group has signed confidentiality agreements with customers, and established an internal system to regulate the legitimate use and effective management of customer information by sales departments, so as to ensure the security of customers' information and prevent information leakage. Important customer files and information are classified as the level-one files, and are properly managed by the archive office of the Group, with an aim to ensure the safety and confidentiality of customer information. During the Reporting Period, no customer information leakage occurred in the Group.

The Group believes that "innovation can change the world" and encourages its employees to engage in innovative activities, respect and protect intellectual property rights. In accordance with the Patent Law of the People's Republic of China (《中華 人民共和國專利法》), we have formulated the Measures for the Administration of Intellectual Property (《知識產權管理辦法》) and established a patent administration department, which is staffed with full-time personnel to effectively manage and protect patents and safeguard the legal rights and interests of the Group and its employees. In addition, the Group has strengthened the protection of intellectual property rights by engaging external experts and third-party professionals, and resolutely protected intellectual property by legal means in case of infringement, and raised the awareness of intellectual property protection of employees through internal publicity and staff training. As of 31 December 2019, the Group had 88 items of registered patents and 33 items of patent applications under registration.

並按照內部制度要求對信息系統使用、軟件開發及應用、數據管理進行規範的監控,確保本集團內部、客戶和合作方的重 要數據及資料得到充分的安全保障。

本集團與客戶簽署保密協議,並已建立內 部體制規範銷售部門對客戶資料的合法使 用和有效管理,以確保客戶的信息安全和 防止信息洩露。重要客戶檔案及資料屬於 一級檔案,由集團檔案室實施妥善管理, 確保客戶信息的安全與保密。報告期內, 本集團未出現客戶信息洩露情況。

本集團相信「創新改變世界」,因此鼓勵 員工開展發明創造活動,尊重及保護知識 產權,根據《中華人民共和國專利法》制 定《知識產權管理辦法》並設立專利管理 部門,由專職人員對專利實施有效管理及 保護,維護本集團及員工的合法權益。此 外,本集團透過外聘專家及第三方專業人 士等加強對知識產權的保護,遭遇侵權事 件時亦堅決採取合法途徑積極維權,並透 過內部宣傳及員工培訓提高員工的知識產 權保護意識。截至2019年12月31日, 本集團擁有88項註冊專利及33項專利申 請在辦理註冊中。

關於我們 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GENUINE ('XIN'CHENG) COOPERATION AND **GROW TOGETHER HAND IN HAND** 「信」誠合作,攜手共同成長

「信」重英才,完善人才管理

Responsible Procurement

Since solar glass production has the special requirement of continuous production, and the guality of raw materials has an important influence on product quality, it is very important to ensure the stability of supply and the guality of raw materials for the production and operation of the Group. Responsible procurement shall be implemented in two ways: externally, we need to fulfill the responsibilities as a purchaser to ensure the lawful, standard, fair and equitable procurement process and supplier management; internally, we need to fulfill the responsibility as a procurement department to provide sufficient, stable and high-quality supply to meet production demand. The Group carries out supply chain management through Enterprise Resources Planning System ("ERP System"), and adopts unified monitoring platform for domestic and 統在採購方面,可充分發揮集團的資源優 overseas procurement. Benefitting from the ERP system, we can give full play to the resource advantage of the Group in procurement, obtain resources at the most reasonable price through comprehensive price comparison and centralised procurement, establish and gradually improve the Group's 時,亦可令本集團更高效地進行原材料庫 global supply chain in combination with the resources of the companies within the Group to reduce the procurement risk 况,確保庫存維持在適當水平。 caused by regional policy changes. Meanwhile, it enables us to manage the inventory of raw materials more efficiently, and timely grasp the inventory situation of each production base, thus ensuring that the inventory is maintained at an appropriate level.

During the Reporting Period, the Group implemented the procurement and bidding process in accordance with established procedures, and required the suppliers to provide integrity commitment and declare relevant interests, in order to regulate their behaviors and prevent possible dishonest 為,同時通過採購合同及要求供應商作 behaviors in the bidding process. At the same time, we ensured that the incoming products complied with the Group's quality, safety and environment standards through procurement contracts and by requiring suppliers to make environmental and safety-related commitments. The economic contract performance rate of the Group was maintained at 100% during the Year.

負責任的採購

由於太陽能玻璃生產具有連續不間斷生產 的特殊要求,且部分原材料的品質對產品 質量具有重要影響,所以確保供應的穩 定性及原材料的品質對本集團的生產經 營十分關鍵。負責任的採購,需從兩方 面落實,對外需要履行採購方的責任,保 障採購流程及供應商管理的合法規範和公 正平等; 對內則需要履行採購部門的責 任,提供充足、穩定、高質量的供應以滿 足需求。本集團通過企業資源計劃系統 (Enterprise Resource Planning System) (「ERP系統」)進行供應鏈管理,國內及 海外的採購均使用統一監控平台。ERP系 勢,通過綜合比價、集中採購確保以最合 理的價格獲取資源,並可結合系內公司資 源建立及逐步完善本集團的全球供應鏈, 以降低地區政策變化導致的採購風險;同 存管理,及時掌握各生產基地的庫存情

報告期內,本集團按照既定程序進行採購 及管理招標流程,並要求供應商提供廉潔 承諾及申報相關利益以規範供應商的行 為,防止招標過程可能發生的不廉潔行 出環保及安全相關的承諾,確保產品符合 本集團的品質標準、安全質量標準及環保 標準。本集團於年內保持經濟合同履約率 100% °

The Group purchases a variety of products worldwide, including fuels, raw materials for solar glass production, construction materials, production equipment, solar modules and other auxiliary materials. The Group adheres to the ethical and sustainable procurement principles and makes best effort to establish long-term friendly relationship featuring equality and mutual benefit, sincere cooperation and mutual growth with suppliers through standard supplier management. Supplier review will be performed by the procurement team, according to the requirements of the Integrated Management Manual (《一體化管理手冊》), and only the supplier who has passed the review can be included in the List of Qualified Suppliers (《合資 格供應商名單》). In the selection of suppliers, the procurement team will give priority to working with reputable suppliers and purchasing products in line with sustainable development criteria whenever possible. The Group manages suppliers according to the External Supplier Management Procedures (《外 部供方管理程序》). In addition to verifying the supplier's product guality, production standards and gualification certification through field visits and evaluations, we have set standards for its code of conduct, including legal compliance, no forced labour and child labour. We will conduct regular assessment on suppliers in the List of Qualified Suppliers and remove those who fail to meet the standard in a timely manner. During the Reporting Period, among all major suppliers providing products and services to the Group, around 87% were domestic suppliers and about 13% were overseas suppliers, which were all gualified suppliers complying with the requirements of the procurement regulations and tendering procedures.



XINYI SOLAR HOLDINGS LIMITED 54 信義光能控股有限公司

本集團於全球採購各種產品,包括燃料、 太陽能玻璃生產原材料、建築材料、生產 設備、太陽能組件及其他輔材等。本集團 致力執行符合道德和可持續發展的採購原 則,透過規範的供應商管理,與供應商建 立平等互利、真誠合作、共同成長的長期 友好的關係。根據《一體化管理手冊》的 要求,由採購組組織供應商評審,通過評 審的供應商方可獲納入《合資格供應商名 單》。在甄選供應商時,採購組會優先考 慮與信譽良好的供應商合作,並盡可能選 購符合可持續發展準則的產品。本集團根 據《外部供方管理程序》對供應商進行管 理,除了通過實地考察和評估,對其產品 質量、生產規範、資質認證等進行審核 外,亦就其行為規範包括法律合規、無強 迫勞動及僱傭童工等方面訂立標準,本集 團亦會對合資格供應商名單內的供應商進 行定期考核,及時剔除不達標者。報告期 內,為本集團提供產品及服務的主要供應 商,其中約87%為國內供應商,約13% 來自海外,全數均為符合採購規範及招標 程序的合資格供應商。

關於我們

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO **IMPROVE TALENT MANAGEMENT** 「信」重英才,完善人才管理

LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

The Group regards its employees as the most valuable assets, and we trust and appreciate every employee who have diligently fulfilled their duties. Also, we fully understand that the business-scale development and brand building of the Group cannot be achieved without the devotion of every 富經驗的員工的付出。因此,本集團高度 dedicated, professional and experienced employee in their respective positions. Therefore, the Group attaches great importance to employees' needs, and pays close attention to the all-round development and physical and mental health of our employees. Through a well-established talent management system, we aim to provide equal development opportunities and broad platforms for the employees who are willing to share the responsibility and develop with the Company. As such, they can shine and gain happiness and satisfaction in the big family of Xinyi Solar.

As of 31 December 2019, the Group employed approximately 3,713 full-time employees, increased by 12.2% over 2018. Benefitting from the sound talent management system, scientific and reasonable talent retention mechanism of the Group, as well as the enhanced efforts in caring employees, responding to their demands and solving their problems in a timely manner. During the Reporting Period, the Group's staff turnover rate decreased by nearly 9 percentage points to 18.6% as compared with the same period of last year.

本集團視員工為最寶貴的資產,信賴及感 激每位盡職履責的員工,亦深明本集團的 規模發展及品牌建立離不開每一位在各自 崗位上保持高度熱忱,擁有專業技能及豐 重視員工的訴求、關注員工的全面發展與 身心健康,務求通過成熟的人才管理體制 為願與企業共承擔、謀發展的員工提供平 等的發展機遇和廣闊的平台令其可盡展所 長,在信義光能大家庭中收穫成長、快樂 及滿足感。

截至2019年12月31日,本集團約有3,713 名全職僱員,較2018年增加12.2%。由 於本集團日臻完善的人才管理體系,科學 合理的人才保留機制,同時加強對員工的 關懷,重視員工訴求和及時解決員工的問 題,故於報告期內,本集團員工流失率較 去年同期下降近9個百分點至18.6%。



2019年信義光能僱傭分佈及總員工離職率



Scientific and Sound Talent Management 科學健全的人才管理體系 System

The Group adheres to Xinyi Group's traditional talent 本集團秉承信義集團傳統的人才管理理念 management concept of "people-oriented", and complies with 「以人為本」,同時恪守適用的法律規範。 applicable laws and regulations. We strive to improve our talent 力爭完善集團的人才管理體系,並透過平 management system and create such a working environment 等規範的合約協議為員工締造一個能讓其 充分發揮潛能及施展抱負的工作環境。本 that employees can give full play to their potential and aspirations through equal and standard agreements. The Group 集團根據既定的人力資源管理制度對員工 manages the employees uniformly according to the established 進行統一管理,已成功建立科學全面的人 才管理體系並在細節上持續提升。 human resource management system. We have successfully established a scientific and comprehensive talent management system and continuously improved the details.

Employment Distribution and Total Employee Turnover Rate of Xinyi Solar in 2019

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO **IMPROVE TALENT MANAGEMENT** 「信」重英才,完善人才管理



The Group's talent management system is established and operated in strict accordance with the laws and regulations of the country and region where the business is located. The internal management systems or measures are established based on four core modules (Employment and Assessment, Compensation and Benefits, Training and Promotion, and Occupational Safety and Health) and implemented by the relevant departments under the supervision of the Board, the management committee ("Management Committee") or professional committee and internal control centre, in order to ensure legal and compliant talent management and fully protect the rights and interests of the employees.

Labour Practices and Talent Attraction

Xinyi Solar recruits employees in a fair, just and open manner and in strict compliance with the Labour Law of the People's Republic of China (《中華人民共和國勞動法》), the Labour Contract Law of the People's Republic of China 《中華人民共 和國勞動合同法》), and the local labour laws in Hong Kong, Malaysia and Canada. Adhering to the principle of integrity and equality, the Group recognises the employment relationship through the labour contract, and specifies relevant terms such as salary and benefits, training mechanism and production safety in the contract to ensure the protection of employees' rights and interests. At the same time, we secure the rights and interests of the Group by applying reasonable restraints through the non-competition, confidentiality and termination terms of the contract.

During the Reporting Period, the Group strictly abode by all 報告期內,本集團嚴格遵守所有禁止強迫 relevant laws and regulations prohibiting forced labour and the 勞動及禁止使用童工的相關法律法規,對 use of child labour, and adopted a "zero tolerance" attitude 一切形式的強迫勞動以及使用童工的違法 towards all forms of forced labour and the use of child labour. 行為採取「零容忍」態度,絕不允許出現任 We will not allow any illegal or unethical employment. Staff 何不合乎法律及道德規範的僱傭行為。員 recruitment and management are subject to internal supervision 工招聘及管理受到內部監管,確保達到既 定的內部制度要求。報告期間,本集團並 to ensure that established internal system requirements are met. During the Reporting Period, the Group was not aware 未發現任何違反禁止使用童工或強迫勞動 of any major violations of laws and regulations related to the 相關的法律法規的重大事件。 prohibition of the use of child labour or forced labour

本集團的人才管理體系建立與運行嚴格遵 循業務所在國家及地區的法律法規,並根 據[僱傭與考核]、「薪酬與福利」、「培訓 與晉升」、「職業安全與健康」四大核心模 塊設置集團內部的管理制度或辦法,由相 關部門負責執行,接受董事會、管理委員 會(「管委會」)或專職委員會及內控中心的 監管,確保合法、合規地進行人才管理, 全面保障員工的權利和利益

僱傭規範與人才吸引

信義光能嚴格遵守《中華人民共和國勞動 法》、《中華人民共和國勞動合同法》,以 及香港、馬來西亞和加拿大當地的勞工法 例,以公平、公正、公開的方式進行員 工招聘。秉著誠信平等的原則,本集團以 《勞工合同》確認僱傭關係,並會於合同中 明確薪酬福利、培訓機制、生產安全等與 員工切身相關的條款,以確保員工的權益 受到保障,同時合同通過不競爭協定、保 密及終止合同條款等進行合理約束,以保 障本集團的權益。

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奉守則,堅守管治之道

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GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO **IMPROVE TALENT MANAGEMENT** 「信」重英才,完善人才管理

Compensation and Benefits for Talent Retention

關於我們

The Group has formulated and strictly implemented the 本集團根據業務所在國家及地區相關法律 standardised Salary System, Welfare System and Incentive System in accordance with the requirements of relevant laws and regulations in the countries and regions where it operates, in order to ensure that competitive and attractive salaries and benefits can be provided to retain outstanding talents. The salaries of the group's employees are mainly composed of basic salary, performance salary and reward and punishment amount. In determining the employee compensation, we take into account the roles and responsibilities, and individual performance of the employees, financial results of the Company, market benchmarks and the economic environment, in order to better strike a balance between meeting employees' expectations and being cost-effective. On the basis of ensuring the legality, compliance, fairness and equality of the employee compensation, the Group also provides employees with medical benefits, housing benefits, holiday benefits, various subsidies, 員工。 share options and other benefits, and offers bonuses, additional paid leave, additional share options, and other incentives to the employees who have outstanding performance and long service contribution.

We closely monitor staff turnover rates, respond to feedback on staff turnover and take appropriate measures to retain talent. During the Reporting Period, the Group's total employee turnover rate was 18.6% (2018: 27.4%).

薪酬福利與人才保留

法規的要求,已制定規範的《薪資制度》、 《福利制度》及《激勵制度》,並嚴格執行, 確保可提供具有競爭力和吸引力的薪酬和 福利,以保留優秀人才。本集團員工的薪 金主要由基本工資、績效工資和獎罰額度 構成,在決定員工薪酬時,主要從員工的 職務及職責、個人表現、公司業績、市場 基準及經濟環境等方面綜合考量,以更好 地在滿足員工的期許與合乎效益之間取得 平衡。在確保員工的薪酬釐定合法、合 規、公正平等的基礎上,本集團還為員工 提供包括醫療福利、住房福利、節假日福 利、各項補貼、購股權等福利,並以包括 獎金、額外有薪假期、額外授予的購股權 等獎勵予表現優秀及長期服務貢獻公司的

我們密切關注員工的流失率,並從員工的 離職意見反饋中及時作出回應,並採取 適當措施挽留人才。於報告期內,本集 團的員工總流失率為18.6%(2018年: 27.4%)。



Notes:

(1) Turnover rate = number of employees leaving the Company in the category/total number of employees of the Group in the category. This is based on Appendix III: Reporting Guide on Social KPIs in the ESG Reporting Guides issued by Hong Kong Stock Exchange in March 2020

Employee Turnover Rate Statistics of Xinyi Solar 2019 信義光能2019年員工離職情況

附註:

(1) 流失率=該類別員工離職人數/該類別 員工總數,乃參考香港聯交所2020年3 月發佈的《環境、社會及管治匯報指南》 中《附錄三:社會關鍵績效指標匯報指 引》谁行數據統計

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LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

Training Mechanism and Career Development 培訓機制與職業發展

Training mechanism

The Group provides diversified pre-job trainings and on-the- 本集團為所有員工提供多樣化的職前與在 iob trainings for all employees and through standardised management, it expects to establish a fair and just competition mechanism to ensure equal access to career and development 等的職業和發展機會。 opportunities for employees.

The administrative department of the Group or its subsidiaries are responsible for organizing trainings for full-time employees in compliance with the requirements of the employee training management system. The departments in charge of trainings related to contents such as production, technology and 人部門配合安排,包括理論及操作培训, information centre arrange for internal trainings with the cooperation by the staffing department. Internal trainings include theoretical and hands-on trainings, of which handson trainings are well-targeted and conducted in small groups. A strict assessment system is put in place for both theoretical and hands-on trainings. In addition to relevant examinations 於特殊工種和特殊工作崗位人員,本集團 and the assessment by the staffing department, the administrative department will follow up, assess, and evaluate the trainings both during and after the trainings, to ensure their effectiveness. The Group conducts skill assessment of and regularly reviews the employees of special types of labour or performing specific assigned tasks according to national laws and regulations and industrial specifications, and the employees shall hold relevant certificates. Employees may also provide feedback on training contents and internal training instructors using the Training Evaluation Form (《培訓評估表》), for the Group to continuously improve the training course system and 訓。 the operating mechanism. The Group also provides external trainings for employees to satisfy their needs for professional knowledge and skills that are not covered by internal trainings. The administrative department will arrange external trainings, and gualified external professional organisations are engaged to provide such trainings. External trainings are deemed to be completed after the administrative department assesses our employees and evaluates the completion of the trainings or employees obtain corresponding qualification certificates.

培訓機制

職培訓, 並透過規範管理, 冀望為員工營 造公平、公正的競爭機制,保障各員工平

有關全職員工的培訓按照本集團既定的員 工培訓管理制度,由集團或下屬公司的辦 公室負責組織。內部培訓由生產、技術、 信息中心等相關的培訓內容輸出部門及用 其中操作培訓實行小範圍精準培訓。理論 及操作培訓均設嚴格的考核制度,除通過 安排相應考試、用人部門考核評估外,辦 公室亦於培訓過程中及培訓後定期跟進、 考核和評估相關培訓,確保培訓效果。對 按照國家法律規範和行業規定進行技能考 核及定期複核,並確保持證上崗。員工亦 可以通過《培訓評估表》對培訓內容及內 部培訓講師進行反饋,令本集團持續完善 培訓課程體系和運行機制。此外,本集團 亦為員工提供外部培訓以滿足內部培訓未 能覆蓋的專業知識和技能的需求,由辦公 室安排,委託合資質的外部專業機構提供 培訓,並由辦公室考核及評估相關培訓的 完成度或獲得相應合格證書後視為完成培

ŝ	Training
\square	requirement 培訓要求



Training Trequirement 培訓要求	=→ Training program 培訓計劃	よ Type of training 培訓類型
Long-term development needs of the Company 公司長期發展需求	Pre-job training (corporate culture, rules and regulations, job-related knowledge, skills and responsibilities training, etc.) 職前培訓(企業文化、規章制度、職位相關的知識技能與職責培訓等) Annual routine training 年度常規培訓 Information system training (including operator training, information personnel training, etc.) 信息系統培訓(包括操作人員培訓、信息人員培訓等) Skill training for employees with special duties (mainly specific to employees engaging the special operations of the production line, technical R&D personnel, financial personnel, information centre management specialists, security specialists, and other personnel with special job needs) 特殊工種技能培訓(主要面對生產線特種作業人員、技術研發人員、 財務人員、信息中心管理專員及安全專員等有職務相關的特殊需求的員工)	Technical training 技術培訓
Customer requirement 客戶需求	Routine training (such as salesman training, quality control training, etc.) 常規培訓(如銷售人員培訓、品質管控培訓等) Themed training (relevant technical and operational special trainings arranged in response to customers' new product requirements) 專題培訓(因應客戶新的產品需求安排相關的技術及操作專題培訓)	Technical training 技術培訓
Legal compliance requirement 法律合規要求	Safety training (including safety education, production safety regulations and operating procedures, safety accident handling, etc.) 安全培訓(包括安全教育、安全生產規定及操作規程、安全事故處理等) Quality control training 品質管控培訓 Integrity training 廉潔培訓 Environmental protection training 環保培訓 Corresponding special training after the update of the national or regional policies/regulations (such as the special training on environmental protection) 國家或業務所在地政策/規定更新後相應的專題培訓(如環保相關專題培訓)	Technical training 技術培訓
Employee development requirement 員工發展需求	Themed training on leadership, business negotiation skills, and ASEAN Trade in Goods Agreement 領導者修煉與領導力、團隊商務談判技能、東盟貨物貿易協定等專題培訓	Skills training 技能培訓

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO **IMPROVE TALENT MANAGEMENT** 「信」重英才,完善人才管理

Besides providing its employees with work-related technical trainings, to ensure that the employees familiarise themselves with their business responsibilities and master relevant professional skills, the Group has firmly fostered the awareness of production safety, integrity, and standardisation, so as to meet the requirements of relevant jobs, unleash their greatest potential, and realise their professional goals. On top of that, 升需求,安排領導力、團隊管理、商務談 the Group also arranges for technical trainings on various aspects such as leadership, team management, business negotiation skills, digital skills, and legal skills according to the employees' requirements for personal development and comprehensive skills improvement. We sincerely hope that in the Xinyi Solar family, our employees can gain satisfaction while acquiring professional skills at work, enhance their personal potential, and grow together with the Group.

During the Reporting Period, the Group provided 47,479 hours 報告期內,本集團為員工提供47,479小 of training for employees, including 3,469 hours of external 時的培訓,其中包括3,469小時的外部 trainings, with the participation of 26,156 persons. The 培訓,獲得26,156人次的參與,受訓員 proportion of trained employees was 97.7%, and the average 工佔比為97.7%,員工平均受訓時數約 training hours of each employee was approximately 12.8 hours. 12.8 小時。

本集團除了為員工提供工作相關的技術培 訓,確保其熟悉自身業務和職責,具備相 關專業技能,並已牢固樹立安全生產、廉 > 潔規範的意識,可滿足相關崗位的要求並 可發揮其於工作上的最大潛能實現專業目 標外,亦根據員工個人發展及綜合技能提 判技能、數碼技能、法律技能等不同範疇 的技能培訓。我們真誠希望,員工在獲得 工作專業技能的同時,亦能在信義光能大 家庭中感到充實和滿足,提升個人潛能, 與本集團共同成長。

Career development

The Group conducts guarterly and/or annual performance appraisals for employees, which are conducted by department heads, subsidiary person-in-charge or division heads and are subject to the supervision of the Management Committee. The Company provides incentives to employees with outstanding performance based on the assessment results upon review and verification, and proposes improvement measures such as re-training to be arranged, followed up and assessed by the administrative department for employees who fail to meet the standards.

The Group is committed to providing employees with fair, 本集團承諾,為員工提供公正平等、不存 equal promotion opportunities without prejudice based on their performance, personal quality, and ability only and regardless of such factors as age, gender, ethnicity, cultural background, religious belief, and political belief, providing sufficient promotion opportunities for employees who perform their duties with diligence. The Group has established and strictly implemented a scientific and transparent promotion process. With the appraisal grades as important reference, the promotion of employees at all levels of the Group shall be assessed, reviewed, and approved by management at the corresponding level with the supervision of the internal control centre, to ensure that the promotion process is in full compliance with the Group's policies.







職業發展

本集團對員工每季度及/或年度進行工作 表現考核測評,由部門負責人、子公司負 責人或分管領導執行並受到管委會的監 管,根據複核認定的考評結果對表現優秀 的員工給予激勵,對於不達標的員工提出 改善措施,如重新培訓等,由辦公室協助 安排、跟谁及考評。

偏見的晉升機會,僅與績效、個人素質和 能力掛鉤,不受年齡、性別、民族、文化 背景、宗教信仰、政治理念相關因素的影 響,保障每一位盡職履責的優秀員工應有 的晉升空間。本集團已建立科學透明的晉 升程序並嚴格執行。本集團各級員工的晉 升均以考評分數作為重要參考,獲得相應 的各級管理層的考核、審查及批准,並受 信義系內控中心的監管,確保晉升的程序 完全符合集團的制度要求。

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2019 2019 環境、社會及管治報告

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Employees' Health and Production Safety

關於我們

Work Safety (《中華人民共和國安全生產法》), the Occupational 業安全及健康條例》(香港)、《1994年職 Safety Health Ordinance of Hong Kong 《職業安全及健康條 例》(香港)), the Occupational Safety and Health Act 1994 in 法》等本集團業務所在國家及地區職業健 Malaysia (《1994年職業安全與健康法》(馬來西亞)), and the 康與安全相關的法令、法規,結合安全生 Factories and Machinery Act 1967 in Malaysia (《1967年工廠 與機械法》(馬來西亞)) as well as other laws and regulations 集團相應制定了《安全生產管理制度》及 related to occupational health and safety in the countries and 《職業健康管理制度》,並於日常經營中 regions where the Group operates its business, and in light 嚴格執行,及受到安全生產專委會(「安 of the actual conditions of production safety and employee health management, the Group has formulated and strictly 注及優化防範與管治措施,以為員工提供 implemented the Production Safety Management System and the Occupational Health Management System in daily OHSAS18001:2007職業健康安全管理體 operations, with the supervision of the Special Committee 系認證。 of Production Safety (the "Safety Committee") and the Management Committee. We will stay focused on and optimise preventive and governance measures, to create a safe and healthy occupational environment for employees. The Group has received the OHSAS18001:2007 occupation health and safety management system certification.

Production safety

Since its establishment, the Group has set up the Safety 本集團自成立起就設立了安委會,安委會 Committee that is responsible for formulating and optimizing the safety management standards of the Group and 統籌及強化安全管理的監控。各事業部及 coordinating and strengthening safety management monitoring. Each of the business divisions and their respective systems has set up a production safety committee, a safety inspection team or an organisation with relevant functions, which is responsible for identifying safety hazards in the system, arranging safety training and production operation standard 對太陽能玻璃生產、太陽能電站建設及運 training according to the Group's planning, and organizing 維環節,除了每週的安全排查、每月安全 employees in the system to participate in safety emergency drills. For solar glass production and construction, operation, and maintenance of solar farms, the Group carries out weekly safety inspections and monthly safety mutual inspections and 提供更安全的工作環境,並通過加強安全 follow up hidden hazards and make rectification in time. Apart 教育培訓、安全宣導提高員工的安全意 from that, the Group provides frontline employees with a 識,以及建立濃厚的企業安全文化,務求 safer working environment by equipping itself with sufficient 消除安全隱患,減少不安全因素,防止人

員工健康與安全生產

According to the Law of the People's Republic of China on 根據《中華人民共和國安全生產法》、《職 業安全與健康法》、《1967年工廠與機械 產及員工健康管理相關的實際情況,本 **委會**」)及管委會的監管。我們會持續關 安全、健康的職業環境。本集團已獲得

安全生產

負責制定及優化本集團的安全管理規範 轄下各系統均設有安全生產委員會、安全 檢查小組或具備相關職能的組織,負責排 查和識別系統內的安全隱患、按照集團的 規劃安排安全培訓和生產操作規範培訓、 組織系統內員工參與安全應急演練等。針 互查、針對安全隱患事項及時跟進整改 外,本集團亦透過配置充足的安全防護用 具、加強安全源的防護措施等為前線員工 safety appliances, strengthening protection measures for the 身、生產和設備安全事故的發生。對於安 safety source, etc. The Group also seeks to eliminate safety hazards, reduce dangerous factors, and prevent the occurrence of personal, production, and equipment safety accidents by enhancing safety education and training, advocating for raising employees' safety awareness, and building rich corporate safety culture. In safety management respect, the Group requires all employees to contribute their efforts with a focus on implementation, including requiring all employees to participate in safety education and training, formulating and strictly implementing the Regulations for Handling Production Safety Accidents (《安全生產事故處理規定》) to minimise the impact of accidents; and the Group implements the Safety Management Incentive System (《安全管理激勵制度》) to encourage employees to act in accordance with the system and arouse their proactive awareness of forestalling and defusing safety risks.

2019年信義光能安全生產相關指標



Note:

(1) Number of working days lost due to work-related injuries per 100 equivalent full-time employees (or the ratio of working days lost) = Total number of working days lost/Total working hours x Annual working hours of 100 equivalent full-time local employees. The annual working hours per 100 equivalent fulltime employees are calculated with reference to the standard working hours required by the labour laws of each business location, which corresponds to 240,000 hours per 100 equivalent full-time employees in Malaysia and 200,000 hours in other regions.

全管理,本集團要求全員行動,重抓落 **實**,包括要求全員參與安全教育培訓,訂 立及嚴格執行《安全生產事故處理規定》將 事故造成的影響降至最低程度,以及實施 《安全管理激勵制度》鼓勵員工按制度辦事 並建立主動意識防範安全風險。

Production Safety Related Indicators of Xinyi Solar in 2019

附註:

(1) 每一百名等效全職員工因工傷損失的工 作日數(或稱損失工作日比率)=損失 工作日總天數/工作總時數x當地每百 名等效全職員工的年工時。每百名等效 全職員工的年工時參照各業務所在地勞 工法例要求的標準工時計算,對應馬來 西亞每百名等效全職員工標準年工時為 240,000小時,其他地區為200,000小 時

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健康管理制度》

The Group has implemented an accountability mechanism for 本集團對安全管理工作實行問責制,集團 safety management in which the persons-in-charge of various business divisions, departments and subsidiaries act as the first responsible persons of production safety, take charge 產工作全面負責。此外,本集團的生產安 of the overall work of the production safety. In addition, the production safety of the Group is also subject to the supervision of the safety authority in the business location, to ensure the fulfillment of corporate production safety responsibilities. During the Reporting Period, the Group maintained the ratio of working days lost at a low level, and the total number of workrelated accidents during the Year was 15. During the Reporting Period, the Group recorded no work-related fatalities.

Employee health

Paying close attention to the physical and mental health 我們密切關注員工的身心健康,日常的職 of employees, the Group implements regular occupational health management with reference to the standards of the OHSAS18001:2007 occupational health and safety management 本集團內部的《職業健康管理制度》,為員 systems and in strict accordance with the Group's internal 工提供更全面的保護。 Occupational Health Management System (《職業健康管理制 度》), to provide more comprehensive protection for employees.

各事業部及下屬部門負責人、下屬子公司 負責人為第一安全生產責任人,對安全生 全亦受業務所在地安全主管部門的監管, 確保履行企業安全生產責任。報告期內, 本集團因工傷引致損失工作日比率維持較 低水平,年內總工傷事故為15宗。報告 期內,本集團亦未錄得發生因工造成的死 亡事故。

員工健康

業健康管理工作參照OHSAS18001:2007 職業健康安全管理體系的標準,嚴格執行



Supervised by the Management Committee, the implementation of relevant work is secured

受管委會監管、確保相關工作的推進落實 Special work arrangement is made for special weather such as high temperature and corresponding measures are taken 針對高溫等特殊天氣制定特殊的工作及採取 相應措施

Employees can provide their feedback on related work through the union, mailbox and other channels to ensure that the relevant system is more in line with the employees' health demands

員工可通過工會、信箱等多渠道反饋對相關 工作的建議,確保相關制度更貼合員工的健 康訴求

Occupational health management training 職業健康管理培訓

Regular occupational health management training is organised to ensure that employees understand the risks, benefits and control information related to the job, and constantly improve their health awareness

定期安排職業健康管理培訓,確保員工了解 職業相關的風險、預防及管控資訊,不斷提 高員工自身的健康意識



Sufficient supply of labour protection equipment 充足的勞保用具配備

Provide employees with adequate professional labour protection equipment for different departments and positions 針對不同部門和工作崗位的需求為員工配備 充足的專業勞保用品

XINYI SOLAR HOLDINGS LIMITED 68 信義光能控股有限公司



Occupational Health Management System of Xinyi Solar 信義光能職業健康管理制度



Legal compliance 合法合規

Strictly compliance with local laws and regulations concerning occupational health

嚴格導守當地職業健康與安全相關的法律法

Implement the internal Occupational Health Management System for the arrangement and supervision of specific

具體工作的安排及監管執行集團內部《職業



Regular body checks 定期體檢

Provide employees with pre-service health checks, annual health checks and occupational health checks for specific positions to ensure that employees are regularly informed of their health status 為員工提供職前健康體檢,年度健康體檢以 及針對特定崗位的職業病體檢,確保員工定 **期**獲悉白身的健康狀況



Regular test by professional organisation to ensure environmental safety 專業機構定期檢測確保環境安全

Arrange a certified professional organisation to test the workplace for occupational disease factors every year, including noise, high temperature, air quality, etc., in order to ensure the compliance and continuous improvement of the working environment

每年安排具備資質的專業機構對生產場所進 行職業病因素檢測,包括噪聲、高溫、空氣 質量等,確保工作環境達標且有持續改善

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Caring and Diversified Development

The Group organises diverse cultural and sports activities through trade unions in various locations, allowing employees 動, 令員工在工作之餘可以充分放鬆, 同 to fully relax after work and, deepening the exchange between employees and departments and further enhancing the united atmosphere of the Xinyi family. As solar farms are located in remote areas, the Group, by setting up new energy branches, regularly organises exchange activities, pays attention to the needs of employees, and shows its respect and care for 對員工的重視與關懷。本集團亦積極建議 employees through actions. The Group also actively encourages employees to live up their leisure lives and achieve a balance between work and life.

關懷與多元化發展

本集團通過各地工會組織多樣化的文體活 時亦有助加深員工、部門間的交流,進一 步提升信義大家庭的團結氛圍。由於太陽 能電站均位於較為偏遠的地區,故本集團 通過設立新能源分會,定期組織交流活 動,及時關注員工的需求及通過行動傳達 員工追求豐富、充實的業餘生活,在工作 與生活中取得平衡。





Since the Malaysian production base commenced operations in 2016, the Group has increasingly recognised that "diversity and inclusiveness" are critical and necessary for team building and corporate development. As the first Chinese solar glass manufacturer with overseas production bases, the Group attaches great importance to the needs of employees with different nationalities, culture, religion, age, and gender for work and life in the factory area, actively listening to, following up, and responding with effective measures in time. Pursuant to the unified management norms based on the Group's Human Resources Management System, we fully understand and respect the differences in employee structure and cultural background of various locations; therefore, we implement differentiated management by setting up local trade unions at various production bases and promote the culture of diversity, innovation, respect for others, and inclusiveness to differences, with full consideration of daily management, training and development, employee activities, etc. We are so detailoriented that we set up canteens that meet special dietary needs, implement a differentiated scheduling system, and provide praver rooms tailored to the needs of different beliefs. etc., to create a more harmonious, warm, and safe working environment for employees.

Owing to the special nature of the Group's business, the proportion of female employees is relatively low. However, the Group has always placed great emphasis on the growth of female employees, with zero tolerance for gender-based prejudice and discrimination. We firmly believe that female employees have made irreplaceable contributions to the development of the Group and are of great importance to the long-term development of the Group. Therefore, by upholding the principle of gender equality, we show care for female employees and help them grow, ensure equal career development opportunities for them, and provide special labour protection for them during special periods stipulated by law, such as personalised work arrangement, sufficient marriage leave and maternity leave, etc. During the Reporting Period, the proportion of female employees increased by around 1 percentage point to 16.64%, while the turnover rate decreased noteably by 9.1 percentage points when compared to 2018 to 15.5%

自馬來西亞生產基地於2016年開始營運 後,本集團愈發認識到「多元化與包容性」 對於團隊建設、企業發展的重要性和必要 性。作為首個擁有海外生產基地的中國太 陽能玻璃生產商,本集團高度重視對不同 國籍、文化、宗教、年齡、性別的員工對 工作及廠區生活的訴求,主動聆聽、及時 跟進,採取有效措施積極應對。在基於集 團《人力資源管理制度》的統一管理規範 上,我們充分理解及尊重各地僱員結構和 文化背景的差異,因此於各生產基地設立 當地工會實施差異化管理,積極推廣多元 創新、尊重他人及包容差異的企業文化, 從日常管理、培訓發展、員工活動等多方 面進行周全考量,從細節著手,如設立符 合特殊飲食需求的食堂、差異化的排班制 度、提供滿足不同信仰需求的祈禱室等, 為員工營造更和諧、溫暖及安心的工作氛 韋。

本集團所經營的業務領域,由於行業的特 殊性,女生佔比較低,但本集團一直十分 重視女性員工的成長,對基於性別而產生 的偏見及歧視零容忍。我們堅信女性員工 為本集團的發展作出不可替代的重要貢獻 並對本集團的長遠發展具備重要意義,因 此,我們堅守性別平等的原則,關懷及幫 助女性員工成長,確保她們獲得平等的職 業發展機會,及在法律規定特殊期間受到 特殊勞動保護,如人性化的工作安排、充 足的婚育假期等。報告期內,女性員工人 數佔比提升約1個百分點至16.64%,而 離職率亦有明顯改善,較2018年下降9.1 個百分點至15.5%。

關於我們

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奏守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

「信」重英才,完善人才管理

CARING FOR ("XIN" HUAI) THE WORLD AND CREATING AN INCLUSIVE SOCIETY 「信|懷天下,促進社會共融

The core value of "people" is taken with heart as the driving force for the Group to move forward. We firmly believe that the long-term development of an enterprise is closely related to the prosperity of the community where it operates its business. Therefore, any development plan without taking corporate social responsibility into consideration will be unattainable and cannot deliver a sustainable development of the enterprise even with short-term economic benefits, just like a tree without roots. The Group, as an enterprise with social sense, actively takes various measures in its daily operations to practice its original intention of "people". Taking solar glass business for instance, the Group, in response to the nation's promotion of "coal-to-gas" reforms, took the lead in implementing and 耗、重污染」的生產模式向綠色、可持續 completing the transition to clean energy, and successfully transformed from its traditional production model of "high energy consumption, high electricity consumption, heavy pollution" to a green and sustainable model. As a member of the green energy industry, the Group appealed to the sustainable development of the United Nations, and responded to the initiative of "Sustainable Energy for All" with actions of direct investment in renewable energy.

Sustainable Development Goals

The United Nations believes that business is a vital partner in achieving the Sustainable Development Goals, and calls on companies everywhere to advance sustainable development through the investments they make, the solutions they 持續發展。本集團知悉並認同企業於實現 develop, and the business practices they adopt. The Group acknowledges and admits the responsibilities it shall undertake and the contributions it may make to achieve the SDGs. As the largest global solar glass manufacturer bearing the enterprise mission of "Leading green new energy" and a leading nonstate-owned solar farm owner and operator in China, the 業務規劃與發展方面響應聯合國的號召, Group actively responded to the United Nations' call in 以具體行動減少對可持續發展議程的負面 connection with its production operations, environment and 影響,並作出積極貢獻 corporate management, business planning and development, reduced the negative impact on the sustainable development with its efforts and made positive contributions.

將[善待天下]的核心價值觀銘刻於心,並 以此作為不斷鞭策本集團前行的動力。我 們深信,企業的長遠發展與業務所在社區 的興旺繁榮緊密相關,因此任何脱離企業 社會責任考量的發展規劃均屬無本之木, 即使具備短暫的經濟效益亦無法令企業實 現可持續發展。作為具有社會承擔意識的 企業,本集團在日常營運上主動採取各項 措施踐行[善待天下]的初心。以太陽能 玻璃業務為例,在國家推進[煤改氣]改 革時,本集團帶頭執行並率先完成向清潔 能源的轉變,成功由傳統「高能耗、高電 模式轉變。身處綠色能源行業,為響應聯 合國的可持續發展呼籲,本集團通過對可 再生能源的直接投資,用行動回應「人人 享有可持續能源]的倡議。

可持續發展目標

聯合國認為企業是實現聯合國可持續發展 目標的重要合作夥伴,並呼籲各國企業通 過投資、開發解決方案和業務實踐推動可 SDGs中應肩負的責任及可作出的貢獻。 作為肩負[引領綠色新能源]企業使命的全 球最大太陽能玻璃製造商以及中國領先的 非國營太陽能發電場擁有人及運營商,本 集團積極在生產營運、環境及企業管理、

Set out below are the examples of the Group's efforts in line 以下例子展示了本集團如何在行動上與可 with the SDGs: 持續發展目標保持一致性:

Sustainable Development Goals 可持續發展目標		
1 ^{NO} POVERTY Ř¥ŘŤŤŤ	End poverty in all its forms everywhere 在全世界消除 一切形式的貧困	1.1
Goal 1: No Poverty 目標一: 無貧窮		



End hunger, achieve food security and improved nutrition and promote sustainable agriculture 消除饑餓, 實現糧食安全, 改善2.2 營養狀況和促進可持續農業

目標二: 零饑餓

Zero Hunger

CARING FOR ("XIN" HUAI) THE WORLD AND CREATING AN INCLUSIVE SOCIETY 「信」懷天下,促進社會共融

Efforts 行動

Provide EPC services for the Anhui Jinzhai Project, the first poverty alleviation project based on photovoltaic model in China and the largest photovoltaic poverty alleviation project of the year, and complete the construction of 8,741 household solar farm projects and 286 solar farm projects on village-level in Jinzhai County, helping 14,300 households out of poverty. In 2017, the Group provided EPC services for the largest poverty alleviation project at village-level in China, and built solar power farms with a total capacity of 314MW in Bozhou City, Anhui Province. Such projects have been providing additional income for residents in poor areas each year

為全國首個光伏扶貧模式項目安徽金寨項目提供 EPC 服務,在金 寨縣完成8.741個戶用太陽能發電場項目及286個村級太陽能發 電場項目建設,幫助14,300戶脱貧,為當年規模最大的光伏扶 貧項目。2017年,為當年全國最大的村級扶貧項目提供EPC 服 務,於安徽省亳州市建設總容量達314兆瓦的太陽能發電場項 目。以上項目每年仍持續為貧困地區居民提供額外收入

1.2 Made tax contributions and promoted employment by investing in solar glass industrial park and solar farm projects, which benefit the local economy

通過投資太陽能玻璃產業園及太陽能發電場項目貢獻税收、促進 就業,帶動當地經濟發展

1.3 Help the disadvantaged group by participating in social welfare activities

诵 過 社會公益活動的參與, 幫 扶 貧 困 群 體

2.1 Explore coordinated development between agriculture and photovoltaic power generation by utilising agricultural complementary solar farms

農光互補電站,探索農業和光伏發電的協同發展

Explore the combination of PV and greenhouse cultivation so as to seek a new sustainable agricultural production model 探索光伏與溫室種植的結合,尋求可持續發展的新型農業生產模 式

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

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GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

Sustainable Development Goals 可持續發展目標			Efforts 行動
3 GOOD HEALTH AND WELL-BEING Goal 3: Good Health and Well-Being 目標三: 良好的健康與福祉	Ensure healthy lives and promote well-being for all at all ages 確保健康的生活方式, 促進各年齡段人群的福祉	3.1	We attach great importance to the health of our employees. To this end, we standardised our management in accordance with the standards as specified by the Occupational Health and Safety Management System (OHSAS18001:2007) 《職業健 康安全管理體系 (OHSAS18001:2007) 》) 我們高度重視員工的健康,遵循《職業健康安全管理體系 (OHSAS18001:2007)》的標準進行規範管理 We advocate a healthy lifestyle. To this end, we encourage our employees to achieve a balance between their work and life and provide them with diverse sports and entertainment activities 我們倡導健康的生活方式,鼓勵員工取得「工作與生活平衡」,並 為其提供多樣化的體育及文娛活動
4 OUALITY EDUCATION Goal 4: Quality Education 目標四: 優質教育	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all 確保包容和公平的優質教育,讓 全民終身享有學習機會	4.1	We actively advocate the concept of "lifelong learning" and provide employees with various training courses so as to help them develop their strengths, achieve overall improvement in work skills and comprehensive personal capabilities, and grow with the Company 我們為員工提供各類不同的培訓課程,幫助他們盡展所長,實現 工作技能和個人綜合能力的全面提升,與公司共同成長,並積極 倡導「終身學習」的理念
5 EENDER EENDER Goal 5: Gender Equality 目標五: 性別平等	Achieve gender equality and empower all women and girls 實現性別平等, 增強所有婦女和 女童的權能	5.1	We adhere to the principle of gender equality, and care about and promote the career growth of all female employees by ensuring they enjoy equal opportunities for career development, and receive special labour protection during special periods as required by laws 我們堅守性別平等的原則,關懷及幫助女性員工成長,確保她們 獲得平等的職業發展機會,及在法律規定特殊期間受到特殊勞動 保護





Economic Growth

目標八:

體面工作和經濟增長

and sustainable economic growth, full and productive employment and decent work for all 促進持久、包容和 可持續經濟增長, 促進充分的生產性就業和 人人獲得體面工作

Efforts 行動

6.1 Continuously reduce the water consumption per unit of finished product by optimising the water recycling system (sewage treatment and recycling system) 通過水循環系統(污水處理回收系統)的優化,實現單位產成品用 水量的持續降低

7.1 Help to further reduce the installation cost of solar facilities by providing module manufacturers with lower cost and higher transmittance solar glass, so as to make it a lower cost energy source, and meet the market demand for reliable green energy with cost effectiveness

> 為組件廠提供更低成本更高透率的太陽能玻璃,助力太陽能裝機 成本的進一步下降,令其成為更低成本的能源,滿足市場對具備 經濟效益、可靠的綠色能源的訴求

7.2 Provide the public with more green and clean energy by investing in solar farm projects. As of the end of 2019, the total approved grid-connected capacity of the Group's solar farms reached 2.63GW, and the power demand of more than one million households can be met by its annual power generation

通過太陽能發電場項目投資,為社會提供更多綠色潔淨的能源。 截至2019年底,本集團太陽能發電場總核准併網規模達到2.63 吉瓦,年發電量可滿足超過百萬家庭的用電需求

8.1 We abide by the labour laws and regulations of the location where we operate our business. In particular, we adhere to the fair employment code, protect the legal rights and interests of all employees, provide them with competitive remuneration and benefits, and prohibit any form of forced labour

> 我們遵守業務所在地勞工法律法規的要求,堅持公平僱傭守則 保障所有僱員的合法權益,為其提供具競爭力的薪酬和福利,禁 止任何形式的強迫勞動

8.2 Boost local economic development and promote employment through investment in solar glass industrial park and solar farm projects

通過投資太陽能玻璃產業園及太陽能發電場項目帶動當地經濟發 展及促進就業

ABOUT	THIS	REP	ORT
關於本	報告		

Sustainable Development Goals

可持續發展目標

10 REDUCED INEQUALITIE

ABOUT US COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

Reduce inequality within and

減少國家內部和國家之間

among countries

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永續發展

Efforts

行動

10.1 Help the people in poor areas out of poverty through

photovoltaic poverty alleviation power stations projects

通過扶貧電站項目幫助貧困地區脱貧

GENUINE ('XIN'CHENG) COOPERATION AND GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

Sustainable			
Development			
Goals			
可持續發展目標			



目標十五:

陸地生物

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and halt biodiversity loss 保護、恢復和促進可持續 利用陸地生態系統, 可持續管理森林, 防治荒漠化, 制止和扭轉土地退化, 遏制生物多樣性的喪失



development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels 創建和平、包容的社會 讓所有人都能訴諸司法,

Goal 10: Reduced Inequalities 目標十: 減少不平等	的不平等	10.2	Care for special disadvantaged groups with greater efforts and provide material and financial supports by actively participating in social welfare activities 積極參與社會公益活動,加強對特殊困難群體的關懷及提供包括物質和資金方面的支持
12 CONSUMPTION C	Ensure sustainable consumption and production patterns 採用可持續的消費和生產模式	12.2	Produce our solar glass under a lower energy consumption and greener model by actively implementing energy saving and emission reduction measures 積極採取節能減排措施,實現太陽能玻璃更低能耗、更綠色的生 產 Purchase in a responsible and sustainable manner, and regulate procurement and supply through quality, eco-friendly and safety agreements 以負責任和可持續的方式進行採購,通過質量、環保及安全協議 規範供應商的行為 Realise sustainable operation by offsetting the carbon emissions generated by solar glass production with the emission reductions achieved through investment and development of solar farm projects 通過投資及開發的太陽能發電場項目實現的減排量抵消太陽能玻 璃生產產生的碳排放量,實現可持續經營
13 CLIMATE CONTROL Goal 13: Climate Action 目標十三: 氣候行動	Take urgent action to combat climate change and its impacts 採取緊急行動應對氣候 變化及其影響	13.1	Take into account the risks and opportunities brought about by climate changes when setting long-term strategic plans. In particular, we shall identify the physical risks and transition risks that the climate change may bring, assess their impact on the Company's business and long-term development, and set targets for carbon footprint reduction of which the progress shall be under the control of the Board 在長期戰略規劃中考慮氣候變化帶來的風險及機遇,對氣候變化 可能帶來的實體風險及過渡風險進行識別,及就其對公司業務及 長期發展的影響力進行評估,針對主要氣候風險採取積極的應對 行動,就減少碳足跡設定目標,並由董事會負責監控進度

Efforts 行動

15.1 Fully protect the local natural resources and biodiversity when developing solar farm projects, including the adoption of new complementary models such as agriculture cum PV model 進行太陽能發電場項目開發時充分保護當地的自然資源和生物多 樣性,如採取農光互補等新型模式 reverse land degradation and 15.2 Plant trees and green belts in the surrounding areas of solar farms, such as the Jinzhai Project and Fanchang Project 於太陽能發電場項目周邊地區植樹造林和建設綠化帶,如金寨項 目、繁昌項目等

Promote peaceful and inclusive 16.1 Maintain zero-tolerance towards any bribery or corruption, and continue to strengthen employees' awareness of integrity, internal control and external supervision 對任何行賄或貪污行為採取零容忍的態度,持續加強員工廉潔意 識、內部監控及外部監管

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Sustainable Development Goals 可持續發展目標		Efforts 行動
17 PARTIMERSHIPS FOR THE GOALS Goal 17: Partnerships for the Goals 目標十七: 促進目標實現 的夥伴關係	Strengthen the means of implementation and revitalise the global partnership for sustainable development 加強執行手段, 重振可持續發展全球夥伴關係	 17.1 Submit ourselves to the regulation of environmental protection authorities, and ensure the environmental monitoring platform of local government where our business is located has real-time access to our monitoring data 接受環保監管機構的監管,監測數據與業務當地政府環保監測平台實時鏈接 17.2 Ensure that industrial park projects and solar farm projects comply with environmental regulations by implementing environmental assessment before project development and environmental protection acceptance after completion 通過開發前環評及竣工後環保驗收確保產業園項目及太陽能發電 場項目符合環保規範
		17.3 Restrain suppliers in connection with environmental protection, corporate governance and employment according to the Notice on Environmental Security (《環保安全告知》), and reserve and manage qualified suppliers through the List of Qualified Suppliers (《合格供方名錄》) which shall be reviewed and adjusted annually 以《環保安全告知》約束供應商於環保、企業管治、用工方面的規範,通過《合格供方名錄》儲備及管理合資格供應商,並進行年度 審核作及時調整

Looking forward, we will continue to take positive actions 未來,我們仍將採取積極的行動,承諾長 and keep our promise to persistently operate our business in 期堅持綠色、可持續經營,通過有效防治 green and sustainable manner. To this end, we will further 進一步降低太陽能玻璃業務的碳排放量, reduce the carbon emissions from our solar glass business 同時壯大太陽能發電場總併網規模實現減 through effective prevention and control, while expanding the 碳量的持續提升。為此,我們制定5年可 total grid-connected capacity of solar power farms to achieve 持續發展目標及長期行動計劃: continuous carbon reduction. We have formulated a five-year sustainable development goal and long-term action plan with respect to this purpose:



Sufficient green energy 更充足的綠色能源

Action plans 行動計劃

Use clean energy for production, increase the use of renewable energy, reduce the carbon footprint, and strive to reduce greenhouse gases emissions per unit of product by 5% by 2023 note (1)

使用清潔能源進行生產,並增加可再生能源 的使用,减少碳足跡,爭取2023年單位產 品溫室氣體排放量下降5% 附註(1)

Adopt strict standards and regulations for the management of exhaust gases emissions, and strive to surpass national standards

採取嚴格標準規範管理廢氣排放,爭取優於 量增加40% MHE(1) 國家標準水平

Obtain and use water resources in a responsible and sustainable manner to further improve the water recycling utilisation rate and strive for no waste except normal evaporation and sedimentation tank loss

以負責任的態度及可持續的方式獲取及使用 水資源,進一步提高循環水利用率,爭取除 正常蒸發及沉澱池損失外不產生浪費

Promote more environmentally friendly product packaging, and strive to adopt paperless packaging for 50% of our products by 2023

推廣更加環保的產品包裝,爭取2023年 50%的產品採用無紙化包裝

Notes: (1) The intensity targets are benchmarked against the relevant data of base year (2018) 附註:(1)強度目標均與基準年(2018年)的相關數據作為基準進行比較





Protect local natural resources and biodiversity while developing and building solar farms, and insist on building environmentally-friendly solar farms

開發及建設電站時保護當地自然資源及生物 多樣性,堅持建設環境友好型電站

Increase investment in renewable energy, and strive to increase the annual carbon reduction of solar farms invested by the Group by 40% by 2023 note (1)

加大可再生能源的投資,爭取2023年,由 集團投資建設的太陽能發電場項目年度減碳

Safeguard the health and safety of employees, with an ultimate goal of zero injury

保障僱員的健康與安全,務求達到零傷害的 最終目標

Conduct procurement in a responsible and sustainable manner and regulate supplier behavior through quality, environmental and safety protocols

以負責任和可持續的方式進行採購,通過質 量、環保及安全協議規範供應商的行為

Promote the inclusive development of the community and make positive contributions to the economy, environment and public welfare

推動社區的共融發展,在經濟、環境及公益 方面積極貢獻

Standardise and monitor the ESG performance of the Company, and make regular and responsible disclosure

規範監控公司的ESG表現,定期盡責披露

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO 「信」重英才,完善人才管理

Community Relations and Ecosystem

關於我們

Protection

Since the operation periods of utility-scale solar farm projects can last for decades, the development of each project shall have far-reaching impacts on local environment, economy and other aspects of the communities. To this end, the Group 生較為深遠的影響。為此,本集團採取與 adopts an environmentally-friendly model that coexists in 原生態環境和諧共存的環境友好型模式進 harmony with the original ecological environment for the development of solar farm projects, and accepts the supervision of the relevant government authorities by submitting the Environmental Impact Report (《環境影響報告》) before the project development commences and the environmental protection inspection after the construction is completed, and responds to the demands of the local communities. During the Reporting Period and the previous operating periods, all power station projects developed and constructed by the Group had met the requirements of environmental protection. Besides 的理念,探索多樣化電站開發模式,並輔 bringing benefits to local economy and promoting employment, the Group pays close attention to the long-term impacts on local ecological environment. The Group has explored diversified power plant development models without sacrificing the ecological environment and destroying the ecological balance, while in the meantime optimised and improved local environment with other supplementary measures.

社區關係與生態保護

由於大型集中式太陽能發電場項目的經營 期可長達數十年,因此每一個項目的開發 均會對當地社區環境、經濟等不同層面產 行太陽能發電場項目的開發,並通過項目 開發前的《環境影響報告》及建設完成後的 環保驗收接受政府相關部門的監管,以及 回應當地社區的訴求。於報告期內及過往 經營期間,由本集團開發及建設的所有電 站項目均符合環境保護的要求,在為當地 帶來經濟效益、促進就業的同時,本集團 亦高度關注對當地生態環境的長遠影響, 堅持「不犧牲生態環境,不破壞生態平衡」 以其他措施優化及改善當地環境。



Xinyi Solar agricultural PV power project 信義光能農光互補電站項目

Cases of Environmentally-friendly Solar Farms Developed by Xinyi Solar 信義光能環境友好型電站開發案例



The Group actively explores the application of solar energy in modern agricultural system to enhance the economic and ecological benefits of the projects. We successfully explored agricultural PV generation that is suitable, under which power generation income can be achieved by making full use of local sunshine resources while planting crops under the PV panels which shall have no damage to the farming layer and can also meet the requirements of farming 積極探索現代農業與光伏的結合應用,以提升項目的經濟及生態效益。通過光伏 板下種植,在充分利用當地日照資源實現發電收益的同時,對耕作層不產生破壞, 滿足耕作要求,成功探索適合長期發展的農光互補模式。



The Huainan project of the Group provides a feasible solution for the comprehensive treatment of coal mining subsidence, a world-recognised problem. The project is located in a coal mining subsidence area in Huainan City, Anhui China's first and the world's largest floating solar farm project at that time. 本集團的淮南項目為採煤塌陷區的綜合治理這一世界公認難題提供了可行的解決方案 。該項目位於安徽省淮南市採煤塌陷區,採納水上漂浮式設計,實現閒置土地的合理 利用和周邊生態修復,亦為中國首個及當時全球最大的水上漂浮太陽能發電場項目

Charity Work

The Group upholds its corporate social responsibility to create value for shareholders and to give back to the society. To practice its core value of "people", the Group pays attention to the needs of disadvantaged groups, and encourages its subsidiaries to organise or participate in various charitable activities organised by local charities and to deliver care and practical help to more minority groups. During the Reporting Period, the Group made charitable and other donations in a total amount of HKD984,000, and actively organised and/ or participated in public welfare and charity events such as helping and assisting the elderly and other minority groups, caring for children, promoting Chinese traditional culture, and protecting the environment.

The household-targeted poverty alleviation project in Jinzhai County, Anhui Province, which the Group participated in the development in 2014, was the first PV poverty alleviation project in China, which in total, had successfully helped 14,300 households out of poverty. 本集團2014年參與開發的安徽省金寨縣精準扶貧到戶項目是中國光伏扶貧模式 的首次應用,整個項目成功幫助14,300戶人口脱貧。

慈善公益

本集團秉持企業公民責任,在為股東創造 價值之餘,亦不忘回饋社會,關注弱勢群 體的需求,鼓勵各子公司組織或參與業務 當地的慈善機構舉辦的各項慈善活動,用 行動傳達「善待天下」的核心價值觀,令更 多弱勢群體感受關懷及獲得實質的幫助。 報告期內,本集團作出慈善及其他性質捐 款共984,000元,並踴躍組織及/或參與 幫扶孤寡老人及其他弱勢群體、關愛兒童 成長、推動中華傳統文化、保護環境等公 益慈善活動。

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY 關於我們 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO 「信」助綠能,實現永續發展

GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

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APPENDICES 附錄

Appendix I: Awards and Certifications 附錄|:榮譽與資質 Awards 榮譽



Enterprise with Credit Rating of AAA (Development and Reform Commission of Anhui Province) AAA級信用企業 (安徽省發展和改革委員會)



Advanced Institution of High-Quality Development, Wuhu City (Party Committee and People's Government of Wuhu City) 蕪湖市高質量發展先進集體



2019 Top 100 Private Enterprises in Manufacturing Industry (Anhui Provincial Department of Commerce) 2019年安徽省民營企業 製造業綜合百強 (安徽省商務廳)



Orbis Blindfold Lunch 奧比斯蒙眼午餐

Our Hong Kong Office participated in the "Blindfold Lunch" organised by Orbis, an international charity, to experience the challenges faced by the visually-impaired during a lunch time and to understand the importance of eradicating blindness.

香港辦公室參加由國際慈善機構奧比斯舉辦的「食走黑暗」蒙眼午餐活動,以 - 頓午餐的時間感受視障人士所面對的困難,認識掃除盲疾的重要性。

Universiti Teknikal Malavsia Melaka CSR activities 馬六甲技術大學企業社會責任活動

During the Year, our production base in Malaysia donated a total of RMB270,000 to support environmental protection and educational public welfare projects such as river protection and Chinese culture promotion 馬來西亞生產基地於年內合共捐贈人民幣27萬元支持有關對河流保護、中華文化 推廣等環保、教育類公益項目。



The person-in-charge of our Malaysian Industrial Park and the 馬來西亞工業園負責人及當地同事參與了 local staff participated in a corporate social responsibility event 馬六甲技術大學舉辦的企業社會責任活 organised by the Universiti Teknikal Malaysia Melaka, and 動,參與馬六甲河的垃圾清理,並進行公 participated in the garbage removal activities for the Malacca 益性捐助,為當地河流保護及污染治理提 River. They also made charitable donations to provide support 供支持。 for local river protection and pollution control.

In addition, our Wuhu and Tianjin production bases also actively organised and encouraged employees to participate in public welfare activities through local trade unions, including 老院慰問孤寡老人、協助校方組織有助學 visiting the elderly who lives in nursing home, and assisting 生健康成長的活動等,盡綿薄之力持續關 schools to organise activities that help students grow healthily, contributing our humble efforts to care for and support groups in need in our communities. The Group also advocates and 和企業組織的義工活動,身體力行「做好 encourages employees to actively participate in voluntary 事, 行善心」。 activities organised by the community and enterprises in various forms to earnestly practice the advocacy of "doing good deeds".

此外,蕪湖及天津生產基地亦通過當地工 會積極組織及鼓勵員工參與,包括前往敬 懷及支援社區有需要的群體。本集團亦倡 導和鼓勵員工以不同形式踴躍參與社區

(中共蕪湖市委及市人民政府)



Qualified and Safe and Trustful Product for Consumer under National Supervision and Inspection (China High-tech Industrialisation Association) 全國監督抽查質量合格 消費者放心產品 (中國科技產業化研究會)



Water-saving Enterprise (The People's Government of Tianjin) 節水型企業 (天津市人民政府)

COMPLIANCE ('XIN'FENG) WITH REGULATIONS BY UPHOLDING CORPORATE GOVERNANCE 「信」奉守則,堅守管治之道

UTILISATION ('XIN'ZHU) OF GREEN ENERGY TO ACHIEVE SUSTAINABLE DEVELOPMENT 「信」助綠能,實現永續發展

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職業健康安全管理體系標準

(TÜV SÜD管理服務 有限公司)

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GENUINE ('XIN'CHENG) COOPERATION AND GROW TOGETHER HAND IN HAND 「信」誠合作,攜手共同成長

LEVERAGE ON ('XIN'ZHONG) TALENTS TO IMPROVE TALENT MANAGEMENT 「信」重英才,完善人才管理

APPENDICES 附錄

Appendix II: 2019 ESG Reporting Guide **Content Index**

Material Issues ^(Note1) 重大議題 ^(附註1)	ESG Guide ESG指引	Index for the Report 本報告索引 Page 頁數	Section 章節
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E2 – Greenhouse Gases Emission and Exhaust Gases Management 溫室氣體排放及廢氣管理	A1.1; A1.2; A1.5	34-37	Greenhouse Gases Emission ar Exhaust Gases Managem 溫室氣體排放及廢氣管理
E3 – Water Resources and Sewage Management 水資源及廢水管理	A2.2; A2.4	37-39	Water Resources and Sewage Management 水資源及廢水管理
E4 – Wastes Management 廢物管理	A1.3; A1.4; A1.6; A2.5	40-42	Wastes Management 廢物管理
E5 – Climate Risks and Responding Strategies 氣候風險與應對策略	_	43-48	Climate Risks and Opportunitio 氣候風險與機遇
E6 – Sustainable Development Governance and Goals 可持續發展管治目標	_	72-79	Sustainable Development Goal 可持續發展目標
人才管理			
Talent Management			
T1 – Employees' Health and Safety 員工健康與安全	B2.1; B2.2; B2.3	66-69	Employees' Health and Produc Safety 員工健康與安全生產
T2 – Labour Practices and Talent Attraction 勞工常規與人才吸引	B1.1; B4.1; B4.2	56-59	Scientific and Sound Talent Management System 科學健全的人才管理體系 Labour Practices and Talent
			Attraction 僱傭規範及人才吸引
T3 – Compensation and Benefits for Talent Retention 薪酬福利與人才保留	B1.2	60-61	Compensation and Benefits fo Talent Retention 薪酬福利與人才保留
T4 - Training and Career Development 培訓及職業發展	B3.1; B3.2	62-65	Training Mechanism and Caree Development 培訓機制與職業發展
T5 – Employee Care, Diversity and Inclusion 員工關懷、多元化與包容	_	70-71	Caring and Diversified Develop 關懷與多元化發展

- assessment" section of this Report. 附註:(1) 有關重大議題的評估流程及結果請參考本報告第26至27頁「重要性評估」部分。

Certifications 資質



ABOUT US

關於我們

ISO9001:2015 Standards for Quality Management Systems (TÜV SÜD Management Service GmbH) ISO9001:2015 質量管理體系標準 (TÜV SÜD管理服務 有限公司)



China Compulsory Certification (CCC) (China Building Material Test & Certification Group Company Limited) 中國國家強制性產品認證 (CCC) (中國建材檢驗認證集團股份 有限公司)



ISO14001:2015 Standards for Environmental Management Systems (TÜV SÜD Management Service GmbH) ISO14001:2015 環境管理體系標準 (TÜV SÜD管理服務 有限公司)



RoHS Certification (SGS) RoHS 認證 (SGS)

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REACH Certification (SGS) REACH認證 (SGS)

CARING FOR ("XIN" HUAI) THE WORLD AND CREATING AN INCLUSIVE SOCIETY 「信」懷天下,促進社會共融

附錄II:2019年《環境·社會及管治 報告》內容索引

APPENDICES 附錄

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G2 – Quality Control and After-sales Service 品質監控與售後服務	B6.2; B6.4	50-52	Long-term Customer Relationship
			長久客戶關係
G3 – Information Security and Privacy Protection 信息安全及隱私保護	B6.3; B6.5	52-53	Long-term Customer Relationship
			長久客戶關係
G4 – Integrity Management and Compliant Operation 廉潔管理及守法經營	A3.1; B7.1; B7.2	14-27	Corporate Governance 企業管治
			ESG Governance ESG 事務管治
G5 – Responsible Procurement and Procurement Performance 責任採購與採購績效	B5.2	54	Responsible Procurement 負責任的採購
G6 – Supplier Management 供應商管理	B5.1	55	Responsible Procurement 負責任的採購
社區參與 Community Participation			
C1 – Community Relations and Ecosystem Protection 社區關係與生態保護	B8.1	80-81	Community Relations and Ecosystem Protection 社區關係與生態保護
C2 – Charity Work 慈善公益	B8.2	81-82	Charity Work 慈善公益



