



China Modern Dairy Holdings Ltd.

中國現代牧業控股有限公司*

(Incorporated in the Cayman Islands with limited liability)

(於開曼群島註冊成立之有限公司)

Stock Code 股份代號: 1117



2020
ENVIRONMENTAL, SOCIAL AND
GOVERNANCE REPORT
環境、社會及管治報告

目錄

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關於本集團 About the Group

中國現代牧業控股有限公司(「本公司」或「現代牧業」) 連同其附屬公司(「本集團」)，為中華人民共和國(「中國」) 乳牛畜牧營運商及原料奶生產商的翹楚。現代牧業於中國經營26個乳牛牧場，擁有超過24.7萬頭乳牛及每年產奶量約1.49百萬噸。本公司首創「種養加一體化、零距離2小時」的生產模式，是中國首家、也是目前唯一一家一體化生產模式並通過SGS認證的企業。現代牧業的產品於過去七年連續在素有食品業「諾貝爾獎」之稱的世界食品品質評鑒大會中獲得金獎。

China Modern Dairy Holdings Ltd. (the “Company” or “Modern Dairy”, together with its subsidiaries, the “Group”) is the leading dairy farming operator and fresh raw milk producer in the People’s Republic of China (the “PRC”). Modern Dairy operates 26 dairy farms in the PRC with dairy cows over 247 thousand heads and annual milk yield approximately 1.49 million tons. The Company initiated the production model of “Zero-distance Integration of Forage Grass Planting, Cows Breeding and Milk Processing within Two Hours”, which is the first and the only enterprise at present in the PRC that applies integrated production model with SGS certification. Modern Dairy’s products have been awarded the Gold Prize of Monde Selection which is generally regarded as the “Nobel Prize” in the food industry, for the past seven consecutive years.

報告說明 About This Report

本公司相信，健康的環境、社會及管治表現對未來可持續發展、達成長期目標和為股東創造價值起著決定性影響。本公司在財務表現穩健提升的同時，密切關注企業社會責任的履行與可持續發展。

The Company believes that outstanding environmental, social and governance performance is of paramount importance to its future sustainable growth, realization of its long-term goals and creation of value for its shareholders, and has been devoted to carrying out its corporate and social responsibilities and striving for sustainable development while steadily improving its financial performance.

報告期內，本公司遵守相關環境、社會及管治報告指南所載的條文進行披露，無環境、社會及管治方面重大不合規事宜發生。

During the reporting period, the Company complied with the relevant disclosure requirements as set out in the ESG Reporting Guide and no material non-compliance in respect of environmental, social and governance issues was identified.



- **匯報原則**
Reporting Principles

環境、社會及管治報告乃按香港聯合交易所有限公司(「聯交所」)主板證券上市規則附錄27所載的環境、社會及管治報告指引(「環境、社會及管治報告指引」)編製，同時參考全球報告倡議組織GRI《可持續發展報告標準》及其食品加工行業補充指引要求的披露指標。根據該指引，採取以下原則：

The Environmental, Social and Governance Report (the “ESG Report”) is prepared in accordance with the Environmental, Social and Governance Reporting Guide (the “ESG Reporting Guide”) in Appendix 27 to the Rules Governing the Listing of Securities on Main Board of The Stock Exchange of Hong Kong Limited (the “Stock Exchange”), and with reference to the Sustainability Development Reporting Guidelines of Global Reporting Initiative (GRI) and the disclosure indicators required by the additional guidance of the food processing industry. According to the guideline, the following principles are underpinned:

重要性：當環境、社會及管治的事宜會對投資者及其他持份者產生重要影響時，必須在本環境、社會及管治報告中列出。

Materiality: Environmental, social and governance issues that have material impact on investors and other stakeholders shall be set out in this ESG Report.

量化：如有訂立關鍵績效指標，該等指標須可予計量並於適當情況下作出有效對比，而所訂立的指標亦須闡述有關量化信息的目的及影響。

Quantitative: If the key performance indicators (KPIs) have been established, they must be measurable and applicable to valid comparisons under appropriate conditions. They must also be able to describe the purpose and impact of quantitative information.

平衡：環境、社會及管治報告須公正地呈報本集團在環境、社會及管治方面的表現。應避免選擇、遺漏或按不當格式呈報從而可能誤導讀者的決策或判斷。

Balance: The ESG Report must provide an unbiased picture of the environmental, social and governance performance of the Group. It should avoid selecting, omitting, or presenting formats that may inappropriately influence a decision or judgment by the reader.

一致性：環境、社會及管治報告須使用一致並披露統計方法，使相關數據日後可作有意義的比較。若統計方法有任何變更，亦須在環境、社會及管治報告中說明。

Consistency: The ESG Report should use consistent and disclose statistical methodologies to allow meaningful comparisons of related data over time. Any changes to the methods used must be specified in the ESG Report.

- **報告範圍**
Reporting Scope

本報告以中國現代牧業控股有限公司及其子公司為主體，根據重要性原則涵蓋本公司主要營收來源 – 奶產品生產經營業務，涵蓋現代牧業下屬各牧場。

This Report is primarily about China Modern Dairy Holdings Ltd. and its subsidiaries, which covers, with regards to materiality, the Company’s main source of revenue, i.e. the dairy production and operation business on all the farms under Modern Dairy.

報告的時間範圍：2020年1月1日 – 2020年12月31日。
Reporting period: 1 January 2020 – 31 December 2020.

- **數據說明**
Information in This Report

報告中所有數據來自現代牧業正式文件和統計報告，如與年報數據不一致，請以年報為準。
All data set out in this Report are adopted from the internal documents and relevant statistics of the Modern Dairy. In case of any inconsistency with our annual report, the latter shall prevail.

- **指代**
Abbreviations

為便於表述和方便閱讀，「中國現代牧業控股有限公司及其子公司」在本報告中以「現代牧業」、「公司」、「本公司／本集團」或「我們」表示。非特殊說明，報告中貨幣單位「元」即「人民幣元」。
For the convenience of presentation and reading, the words of “Modern Dairy”, “company”, “the Company/Group” or “we” refer to “China Modern Dairy Holdings Ltd. and its subsidiaries” throughout this Report. Unless otherwise specified, the currency unit “yuan” in this Report refers to “RMB”.

- **報告獲取**
Access to This Report

您可以在港交所網站及現代牧業網站主頁獲取本報告的中、英文PDF版本。
You can access this Report in Chinese and English in PDF on the website of Hong Kong Exchanges and Clearing Limited and the home page of Modern Dairy.

港交所披露官網／Official website of HKEX news:
<http://hkexnews.hk/>

現代牧業官網／Official website of Modern Dairy:
<http://www.xiandaimuye.com/>
<http://www.moderndairyir.com/>

本報告以中英文兩種文字出版，在對兩種文本理解發生歧義時，請以中文文本為準。
This Report is published in both Chinese and English. In case of any discrepancies between the two versions, the Chinese version shall prevail.

- **反饋**
Feedback

本集團歡迎投資者及股東通過傳真(+852 2851 6980)或電郵(info@moderndairyir.com)與本公司管理層分享彼等之意見。

The Group welcome investors and shareholders to share their views with the management of the Company by fax at +852 2851 6980 or email info@moderndairyir.com.



總裁致辭

CEO's Statement

2020年，突如其來的新型冠狀病毒疫情對社會經濟造成劇烈衝擊，乳業發展面臨重大挑戰，我們積極應對，抓住機遇，迎接考驗。我們持續以推動行業發展為己任，力行「牧草種植、奶牛養殖、牛奶加工一體化」的全產業鏈模式，保障優質奶源供應及高品質產品製造。我們在自身業務發展的同時，堅持綠色運營，保障員工權益，踐行員工關愛，完善供應鏈管理，投身社會公益慈善，積極實現企業社會價值，推動實現經濟、社會和環境可持續發展。

In 2020, the sudden outbreak of the COVID-19 pandemic had a severe impact on our society and economy, and confronted the dairy industry with major challenges, to which we responded with assertive determination by tapping into the arising opportunities and taking the challenges head-on. We insisted on our mission to advance the development of our industry, and promote the whole industrial chain model of "Integration of Forage Planting, Cow Breeding and Milk Processing" to ensure the supply of quality milk and the production of quality products. While making relentless efforts to grow our business, we insisted on green operation, safeguarded the rights of our employees, cared for them, streamlined our supply chain, and participated in public welfare activities, aiming to realize our social value, and promote the sustainable development of our economy, society and environment.

打造智慧生態牧場，積極踐行節能減排

Building a smart ecological farm, and actively promoting energy saving and emission reduction

現代牧業以數字賦能乳業新生態，重視牧場信息化建設，將牧場種植、奶牛養殖、奶源加工及消費者洞察進行深度整合，促進傳統牧場的智慧轉型。我們積極落實綠色發展理念，構建「飼草種植 - 奶牛養殖 - 糞污處理 - 沼氣發電 - 沼肥還田」的綠色循環產業鏈條，力行開源節流，持續加強減排管理，堅持走環保、生態、效益相結合的發展之路。

Modern Dairy attaches remarkable importance to the construction of IT infrastructure in its farms and digitally empowers the new ecosystem of the dairy industry by deeply integrating farming, cow breeding, milk processing with consumers' demand, and accelerates the transformation of traditional farms into smart farms. We actively promote the concept of green development by constructing a green cycling industrial chain of "grass growing - cow breeding - manure treatment - power generation with biogas - soil fertilization with organic waste", and striving to open up sources and cut down on expenses, continuously strengthening emission reduction and insisting on integration of environmental protection, ecology and efficiency.

科學餵養以牛為本，全面保障奶牛福利

Feeding our cows scientifically and ensuring their well-being

現代牧業始終高度重視動物福利，堅持科學飼養，專注為奶牛打造舒適的成長環境，最大程度保證奶牛的健康。我們堅信，好牛好草產好奶，只有普惠「動物福利」及「養好牛」，才能保障奶源安全「產好奶」，打造比肩國際品質的中國好牛奶。

Modern Dairy attaches remarkable importance to the animals' well-being by adopting scientific breeding with focus on creating a comfortable environment for its cows and does its best to ensure their health. We firmly believe that good cows fed with good grass will produce good milk, and only by "ensuring the universal benefits of our animals" and "breeding healthy cows" can we guarantee the safety of our milk source and "produce good milk" that is comparable to international quality.



同心共鑄純真鮮活，協力打造高端原奶

With joint efforts, we guarantee purity and freshness, and produce high-end raw milk

現代牧業聯合上下游供應商、合作夥伴打造高品質責任產業鏈，實現「種養加一體化、零距離2小時」生產模式。我們持續完善原奶質量管理，將原奶品控貫穿源頭、過程和成品三階段，確保每一滴牛奶的「純真鮮活」，為消費者提供完美的品質。2020年現代牧業收到第59屆世界食品品質評鑒大會評委會喜報，「尊貴裝純牛奶」、「金獎純牛奶」及「高鈣牛奶」三支產品均捧得Monde Selection(世界食品品質評鑒大會)金獎，其中「尊貴裝純牛奶」創下七連冠記錄，「金獎純牛奶」榮獲兩連冠。

Modern Dairy united its upstream and downstream suppliers and partners to create a high quality and responsible industrial chain, which has realized the production model featuring “Zero-distance Integration of Forage Grass Planting, Cow Breeding and Milk Processing within Two Hours”. We continue to improve the quality of our raw milk, and exercise strict quality control throughout the three stages of raw milk production, i.e. source, processing and finished product, so as to ensure that every drop of it is “pure and fresh” with the best quality for our consumers to enjoy. In 2020, we received an exciting news from the Jury of the 59th Monde Selection that three of our products, namely “Premium Pure Milk”, “Gold Pure Milk” and “High Calcium Milk”, had won the Gold Award of Monde Selection, among which our “Premium Pure Milk” has won the Gold Award for seven consecutive years while the “Gold Pure Milk” has won it for two consecutive years.

攜手員工安全成長，熱心公益普惠萬家

Working together with our employees, helping them grow safe and benefiting them with our devotion for public welfare

現代牧業一直秉承以人為本的理念，深諳員工是企業寶貴的財富，充分保障員工基本權益和身心健康，設置完備的培訓晉升機制，助力員工成長發展，開展豐富多樣活動，踐行企業人文關懷，打造和諧團結、互愛互助的員工氛圍。同時，我們踴躍參與社會公益活動及扶貧活動，促進當地就業，持續推動公司與社會共同發展。

Modern Dairy has been adhering to a people-oriented philosophy, with a deep understanding that its employees is its most valuable wealth, for which it will do its best to protect their basic rights and physical and mental health, e.g., setting up a complete training and promotion mechanism to help them grow and develop, organizing a variety of activities to show its care for them, with the aim of creating a harmonious corporate culture and atmosphere in which they love and help each other. At the same time, we actively participate in social welfare and poverty alleviation activities, aiming to promote local employment, and advance the common development of the Company and our society.



走進現代牧業

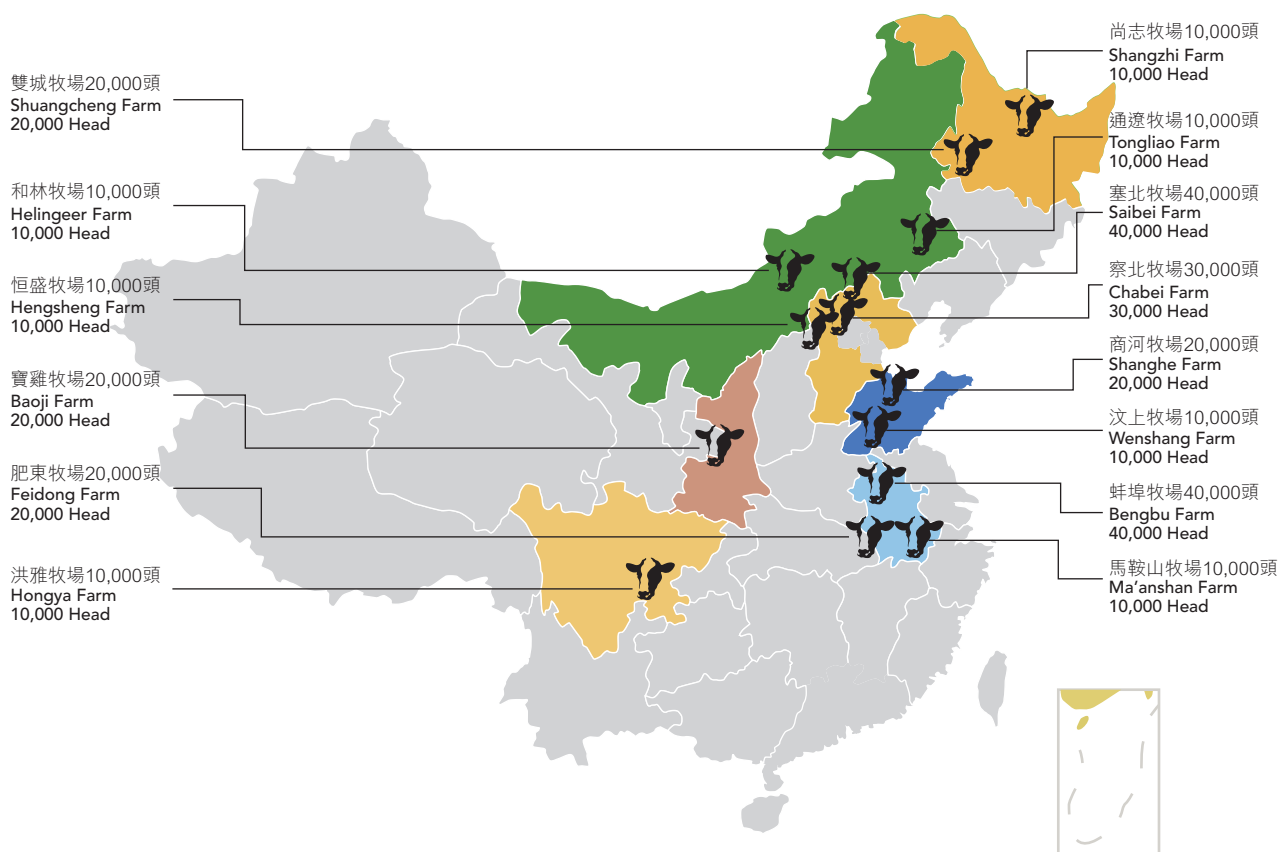
About Modern Dairy

現代牧業成立於2005年9月，是一家專門從事奶牛養殖和牛奶生產的企業，總部位於安徽省馬鞍山。2010年11月26日在香港聯交所成功上市，是全球第一家以奶牛養殖資源上市的企業。依托全球首創的「牧草種植、奶牛養殖、牛奶加工一體化」全產業鏈生產模式，現代牧業已經發展成為國內規模最大的奶牛養殖企業、高品質原奶供應商及優質乳加工製造者。

Founded in September 2005, Modern Dairy specializes in cow breeding and milk production, with headquarter in Ma'anshan City, Anhui Province. It was successfully listed on the Hong Kong Stock Exchange on 26 November 2010 and has become the first listed enterprise focused on dairy cow breeding in the world. Modern Dairy has become the largest dairy farming enterprise, high-quality raw milk supplier and dairy processing manufacturer in China leveraging on the world's proprietary production model of "integration of forage planting, dairy farming and milk processing" that covers the whole industry chain.

我們以「創建世界最先進的牧場，生產世界最優質的牛奶」的經營發展戰略為指導，長期堅持「專心、專業、專注」於中國乳業發展。在公司整體發展戰略規劃的部署下，截至報告期末，現代牧業已在全國共建萬頭規模奶牛養殖牧場26個，奶牛存欄數247,371頭，成乳牛136,203頭，小母牛及小牛111,168頭，年產鮮奶達149萬噸，成乳牛年平均單產11.1噸，總銷量約146萬噸。

Insisting on "attention, professionalism, concentration" philosophy, the Company is committed to the development of China dairy industry under the guidance of the operation and development strategy of "building the world's most advanced farms and producing the world's best milk". Relying on the overall development strategy and plan of the Company, as of the end of the reporting period, Modern Dairy has built 26 dairy farms with hard size of ten thousand and more each, with 247,371 cows in total, of which 136,203 were milkable cows, and 111,168 were heifers and calves. An annual fresh milk yield was 1.49 million tons, the average annual milk production volume of milkable cows was 11.1 tons, and the total sales volume was approximately 1.46 million tons.



企業文化 Corporate Culture



願景目標 Vision & Goals

集行業經驗，融全球智慧，用科技管理，成就現代牧業養殖加工一體化行業領軍地位。

Gathering industrial experience, integrating global wits, and managing with science and technology to secure our leading position in the integrated livestock breeding and processing industry.



企業使命 Corporate Mission

創建世界最先進的牧場，生產世界最優質的牛奶，實現人與自然和諧發展。

Building the most advanced farm and producing the best milk in the world, realizing the harmonious development of man and nature.



管理理念 Management Philosophy

高標準、講原則、重執行、抓細節、提效率。

Maintaining high standards, adhering to principles, emphasizing on execution, perseverance on details and striving for efficiency.



質量理念 Quality Philosophy

純：從奶牛的乳頭到百姓的口頭確保「零添加」，做到產品始終如一；

真：每一滴原奶都來自於自由規模化牧場，確保使用最優質的工藝加工為最終產品，好牛奶真品質；

鮮：牛奶的微生物指標越低越鮮，現代牧業量化的標準才是看得見的鮮；

活：牛奶從乳頭到加工的時間越短越新鮮，「活」是可以量化的，現代牧業只用2小時完成全過程。

Purity: Ensuring "zero additives" from "teats" to "tongues", and that our products are always of the same good quality;

Truth: Ensuring that every drop of the raw milk is from our self-owned farms, which will be processed into final product through the best process, being good milk of true quality.

Freshness: The lower the amount of microbes in milk, the fresher it is, and our quantified standards for freshness makes the real visible freshness;

Liveness: The shorter it takes for milk to travel from the teats to the processing line, the fresher it is, and "liveness" can be quantified: it takes Modern Dairy merely 2 hours to complete the whole process.

企業事記 Milestones

- 2020年1月9日
9 January 2020

現代牧業榮膺「最佳投資者關係管理」大獎。
Modern Dairy won the “Best Investor Relations Management” award.

- 2020年4月6日
6 April 2020

現代牧業尊貴純牛奶、金獎純牛奶、高鈣牛奶三支產品獲Monde Selection金獎，尊貴純牛奶創下金獎七連冠記錄。
Modern Dairy’s Premium Pure Milk, Gold Pure Milk and High Calcium Milk won the Gold Award of Monde Selection, among which the Premium Pure Milk has done it for 7 consecutive years.

- 2020年6月19日
19 June 2020

現代牧業被人民日報實名點贊，「走讀」欄目深入牧場，了解兩小時製造金獎牧場奶的秘密。
Modern Dairy was “liked” by the People’s Daily, with its “Focus (走讀)” column paying a deep-reaching visit to the farm to learn the secrets of producing gold award-winning pastoral milk in two hours.

- 2020年7月5日
5 July 2020

現代牧業持續盈利獲多家機構看好，各大行發佈評級報告。
Modern Dairy’s continued profitability has been well received by many institutions, with major banks issuing rating reports in its favour.

- 2020年10月11日
11 October 2020

現代牧業攜金獎牛奶及新品脫脂牛奶亮相第十一屆中國奶業大會暨2020中國奶業展覽會和2020中國奶業20強(D20)峰會，被授予「抗疫捐贈奶業企業」稱號，並入選2020中國奶業「融智創優」品牌企業。
Modern Dairy brought its Gold Award Milk and new Skimmed Milk to the 11th Dairy Conference of China & 2020 China Dairy Exhibition | 2020 China Dairy 20 Summit, and was honoured with the title of “Anti-COVID-19 Donation Dairy Enterprise (抗疫捐贈奶業企業)” and selected as one of the “Smart and Innovative (融智創優)” enterprises in China’s dairy industry in 2020.



- 2020年11月19日
19 November 2020

現代牧業榮膺2020網易新能量 • 乳製品行業峰會「年度最具成長力新銳品牌」大獎，公司總裁高麗娜女士榮獲「年度最佳經理人&操盤手」大獎。

Modern Dairy won the “Emerging Brand with Greatest Growth Momentum of the Year (年度最具成長力新銳品牌)” award at the 2020 NetEase New Energy – Dairy Industry Summit, and Ms. Lina GAO, President of the Company, received the “Best Manager & Trader of the Year” award.

- 2020年12月17日
17 December 2020

現代牧業隆重舉辦「同行十五載 • 聚力創未來」15週年盛典，並重磅發佈五年領跑計劃。

Modern Dairy held a grand ceremony for its 15th anniversary under the theme of “With 15 Years of Partnership, We Gather Together for a Brighter Future (同行十五載 • 聚力創未來)” with its Five-Year Lead Plan being announced.



可持續現代牧業

Sustainable Modern Dairy

公司治理

Corporate Governance

現代牧業遵守《中華人民共和國公司法》等國家法律法規及各項監管規定，按照香港聯合證券交易所上市規則和現代企業管理制度要求，建立較為完善的內部管理體系，設置股東大會、董事會、公司管理層，建立決策權、監督權和經營權之間權責分明、各司其職、運轉協調的運行機制，保障公司運作高效、規範、有序，兼顧各利益相關方的利益。

Modern Dairy complies strictly with the Company Law of the People's Republic of China and other national laws and regulations as well as various regulatory requirements, and has established a sound internal management system in accordance with the listing rules of the Hong Kong Stock Exchange and the requirements of the modern corporate management system, which consists of a general meeting, a board of directors and a corporate management as well as an effective operational mechanism with clear delineation of the decision-making, supervisory and operational powers and responsibilities, aiming to guarantee the smooth and coordinated operation of the Company while effectively protecting the interests of our stakeholders.

公司董事會向股東負責，以負責任及有效的方式管理公司。每名董事均致力為現代牧業最佳發展貢獻自身專業技能及知識。董事會決定公司目標和策略，監察及控制公司在實踐策略性目標過程中的經營及財務表現，並授權行政總裁及公司管理層在公司董事會監督下負責公司業務的日常管理。董事會下設薪酬委員會、審核委員會、提名委員會、戰略及發展委員會等四個專門委員會，在董事會召開前對審議事項提前審議，提高董事會運作效率。2020年，現代牧業共召開股東週年大會1次，董事會5次。

The Board of Directors of the Company is accountable to the Shareholders and manages the Company in a responsible and effective manner. Each Director is committed to contributing his or her professional skills and knowledge to the best development of the Company. The Board of Directors decides on the Company's objectives and strategies, monitors and controls the Company's operational and financial performance in the process of achieving its strategic objectives, and delegates responsibility for the day-to-day management of the Company's operations to the Chief Executive Officer and the Company's management, under its supervision. The Board of Directors has four specialized committees under it, namely the Compensation Committee, Audit Committee, Nomination Committee and Strategy and Development Committee, which are responsible for reviewing in advance the issues to be considered at the Board meetings, aiming to enhance the operational efficiency of the Board. A total of one annual general meeting and five Board meetings were held in 2020.

反腐倡廉 Anti-corruption

現代牧業嚴格遵守《中華人民共和國刑法》《中華人民共和國公司法》等要求，高度重視反腐管理工作。公司紀檢中心在報告期內採取多種措施，加強反腐監督，保障公司平穩合規運營。報告期內，公司共組織開展廉潔培訓154次，共計參與7,438人次。

Modern Dairy strictly complies with the Criminal Law of the People's Republic of China and the Company Law of the People's Republic of China, and attaches remarkable importance to its anti-corruption efforts. During the reporting period, the Company's Discipline Inspection Center adopted various measures to strengthen anti-corruption supervision and ensure the Company's smooth and compliant operation. During the reporting period, the Company organized a total of 154 anti-corruption training sessions with a total of 7,438 participants.



反貪污教育 Anti-corruption education

加大反腐倡廉宣傳教育力度，通過網絡及現場等方式開展廉政培訓，並舉辦「廉政宣傳月」活動，通過自上而下、多層次、多角度的廉潔教育活動讓集團各級員工了解到違紀違規的後果和危害性，使員工從主觀上抵制和反對違紀違規行為，營造風清氣正的廉潔氛圍，增強員工廉潔自律意識。

The Company enhanced its anti-corruption publicity and education efforts by organizing various online and physical anti-corruption education sessions as well as the "Anti-corruption Publicity Month" activities. With such from-top-to-toe, multi-level and multi-angle anti-corruption education activities, we aim to help our employees understand the consequences and dangers of disciplinary violations so that they can instinctively resist and oppose such behaviours and maintain their honesty with enhanced awareness of integrity and self-discipline.



專項監督檢查 Targeted supervision and inspection

加大對裝卸外包、糞肥還田、備品備件等環節專項監督檢查力度，發現制度執行中存在的問題，總結經驗與有效做法，從源頭上規避腐敗風險。報告期內，共計開展16項專項檢查。同時，公司對青貯、淘牛、疫情防控等關鍵業務開展重點專項巡察，加強監控管理。

The Company intensified its targeted supervision and inspection on outsourcing of loading and unloading business, manure returning to field, spare parts management, etc. aiming to reveal problems during the execution of its policies and strategies, learn from the experience and sum up effective practices, and prevent corruption at the very beginning. During the reporting period, the Company carried out a total of 16 special inspections, and launched targeted special inspections for such key businesses as green storage, cattle panning and COVID-19 prevention and control, aiming to enhance its management expertise.



反貪污舉報渠道 Anti-corruption reporting channels

現代牧業積極鼓勵群眾加強監督，設立舉報電話、舉報郵箱等信訪舉報渠道，方便群眾及時準確地進行反饋，促進公司平穩健康發展。

Modern Dairy encourages the public to exercise closer supervision on it and has set up hotlines and mailboxes to facilitate timely and accurate report of corruption cases, with the aim of ensuring the smooth and sustainable development of the Company.



違規違紀懲處 Punishment for violations and misconducts

現代牧業紀檢中心對收到的違規違紀案件線索核查，嚴格按照制度規範嚴肅處理問責相關人員，積極挽回公司經濟損失，並將相關違規違紀情況在集團內通報，以示警戒。

The Infrastructure Center of Modern Dairy regularly verifies the clues about the violations and misconducts received, makes persistent efforts to find out and hold the relevant offenders accountable in strict accordance with the relevant rules and regulations, striving to recover the Company's economic losses while making proper disclosure of such violations and misconducts across the Group as a warning.

可持續發展管理

Sustainable Development Management

- 可持續發展管理體系
Sustainable Development Management System

公司董事會高度重視環境、社會及管治相關工作，並對相關策略及匯報負責，包括評估及釐定環境、社會及管治風險，確保公司設立有效的風險管理和內部監控系統，定期檢討公司的表現，並審批公司環境、社會及管治報告內的披露資料。本報告亦經過董事會審閱發佈。

The Board paid great attention to the issues of the Company concerning environment, society and governance, and was responsible for the relevant strategies and reporting, including evaluation and determination of environmental, social and governance risks, ensuring establishment of an efficient risk management and internal monitoring system of the Company, regularly reviewing the Company's performance and approving information disclosed in the environmental, social and governance report of the Company. This report was also issued upon reviewed by the Board.

在董事會授權下，公司成立環境、社會及管治工作小組，成員覆蓋總部部門及附屬公司，負責日常環境、社會及管治工作管理、執行以及績效管理和信息披露。根據香港聯合交易所「上市規則」附錄27《環境、社會及管治相關指引》要求，參考全球報告倡議組織《GRI可持續發展報告標準》，建立公司環境、社會及管治指標體系，致力於不斷提升相關績效管理水平。

The Company, as authorized by the Board, established an environmental, social and governance working group consisting of members from the headquarter and subsidiary companies, which were responsible for the daily management and execution of environmental, social and governance tasks, performance management and information disclosure. In accordance with the requirements of Appendix 27 "Environmental, Social and Governance Reporting Guide" of the "Listing Rules" of the Hong Kong Stock Exchange and with reference to the "GRI Sustainability Reporting Standards" of the Global Reporting Initiative, the Company established an environmental, social and governance index system, committing to continuously improving relevant performance management standards.

- **ESG匯報原則**
ESG Reporting Principles

重要性：我們的ESG事宜重要性由董事會釐定，利益相關方溝通及實質性議題識別的過程及實質性議題矩陣均在本報告中進行披露。

Materiality: The materiality of our ESG issues is determined by the Board of Directors, and the process of stakeholder communication and identification of substantive issues as well as the matrix of substantive issues will also be disclosed in this report.

量化：本報告中定量關鍵績效指標的統計標準、方法、假設及／或計算工具，以及轉換因素的來源，均在報告釋義中進行說明。

Quantitative: The statistical criteria, methods, assumptions and/or calculation tools for the quantitative KPIs in this report, as well as the sources of the conversion factors, are all illustrated in explanatory notes.

平衡：本報告不偏不倚地呈報本公司報告期內的表現，避免可能會不恰當地影響報告讀者決策或判斷的選擇、遺漏或呈報格式。

Balance: This report presents the Company's performance for the reporting period in an unbiased manner, which has avoided selections, omissions or presentation formats that might improperly influence the decisions or judgments of its readers.

一致性：本報告披露數據所使用的統計方法均保持一致。

Consistency: The statistical methods used for information disclosure in this report are consistent.

- **利益相關方溝通**
Stakeholders Communication

我們持續保持與利益相關方的溝通，通過利益相關方座談會、電話及網絡會議等多元化溝通渠，持續聆聽利益相關方期望與訴求，並對利益相關方的意見及時做出回應，在依法合規運營的同時，履行社會責任，為利益相關方創造價值。

We maintain effective communication with our stakeholders, listening to their expectations and requests through various communication channels such as stakeholder seminars, phone calls and online meetings, and responding to their opinions in a timely manner, aiming to fulfil our social responsibility and create value for our stakeholders while operating in compliance with the applicable laws and regulations.

本年度，我們制定了利益相關方調查問卷並向利益相關方分發問卷，調查統計利益相關方在不同層面的關注議題及影響程度，並從可持續發展角度出發，整理形成利益相關方溝通情況表，為本公司實質性議題識別工作提供基礎。

During the year, we developed questionnaires and distributed them among our stakeholders, trying to find out their concerns and the influence of such concerns at different levels, with the results of which we have compiled a stakeholder communication table, aiming to provide a basis for identification of the Company's substantive issues from the perspective of sustainable development.

利益相關方 Stakeholders	期望與訴求 Expectations and Demands	溝通方式 Communication Mode	我們的回應 Our Response
股東／投資者 Shareholders/ Investors	<ul style="list-style-type: none"> 保障股東權益 Safeguard the rights and interests of shareholders 優異的業績 Outstanding performance 持續穩定增長的投資回報 Sustained and steady increase of return on investment 廉潔透明的運營 Honest and transparent operation 	<ul style="list-style-type: none"> 股東大會 General meeting 定期信息披露 Regular information disclosure 聯交所／公司網站 Website of the Stock Exchange/Company 投資者會議及路演 Investor conference and roadshow 	<ul style="list-style-type: none"> 透明公開的信息披露 Transparent and open information disclosure 強化投資管理 Enhance investment management 加強企業風險管理 Strengthening enterprise risk management 持續提高價值創造能力 Continuously improve the ability to create value

利益相關方 Stakeholders	期望與訴求 Expectations and Demands	溝通方式 Communication Mode	我們的回應 Our Response
政府／監管機構 Government/ regulatory agency	<ul style="list-style-type: none"> • 合規經營 Compliance • 嚴格的內部控制和風險管理 Strict internal control and risk management • 促進經濟發展 Promote economic development • 突出社會貢獻 Extraordinary contribution to the society • 安全運營 Safe operation 	<ul style="list-style-type: none"> • 信息報送 Information submission • 合規報告 Compliance report • 參與會議／研討會 Attending meeting/seminar • 特別查詢／檢查 Special inquiry/inspection • 遞交文件 Submission of documents 	<ul style="list-style-type: none"> • 加強合規運營 Strengthen compliance operation • 加強安全管理 Strengthen safety management • 依法納稅 Pay taxes according to law
消費者 Consumers	<ul style="list-style-type: none"> • 個人隱私保護 Personal privacy protection • 食品安全 Food safety • 優質服務體驗 Superior service experience • 營養健康多樣的產品選擇 Availability of nutrient, healthy, and diversified products 	<ul style="list-style-type: none"> • 公司官網 Official website of the Company • 客服熱線 Customer service hotline • 客戶滿意度調查 Customer satisfaction survey 	<ul style="list-style-type: none"> • 保障消費者權益 Safeguard consumers' rights • 保障產品質量 Product quality guarantee • 生產公開透明 Open and transparent production

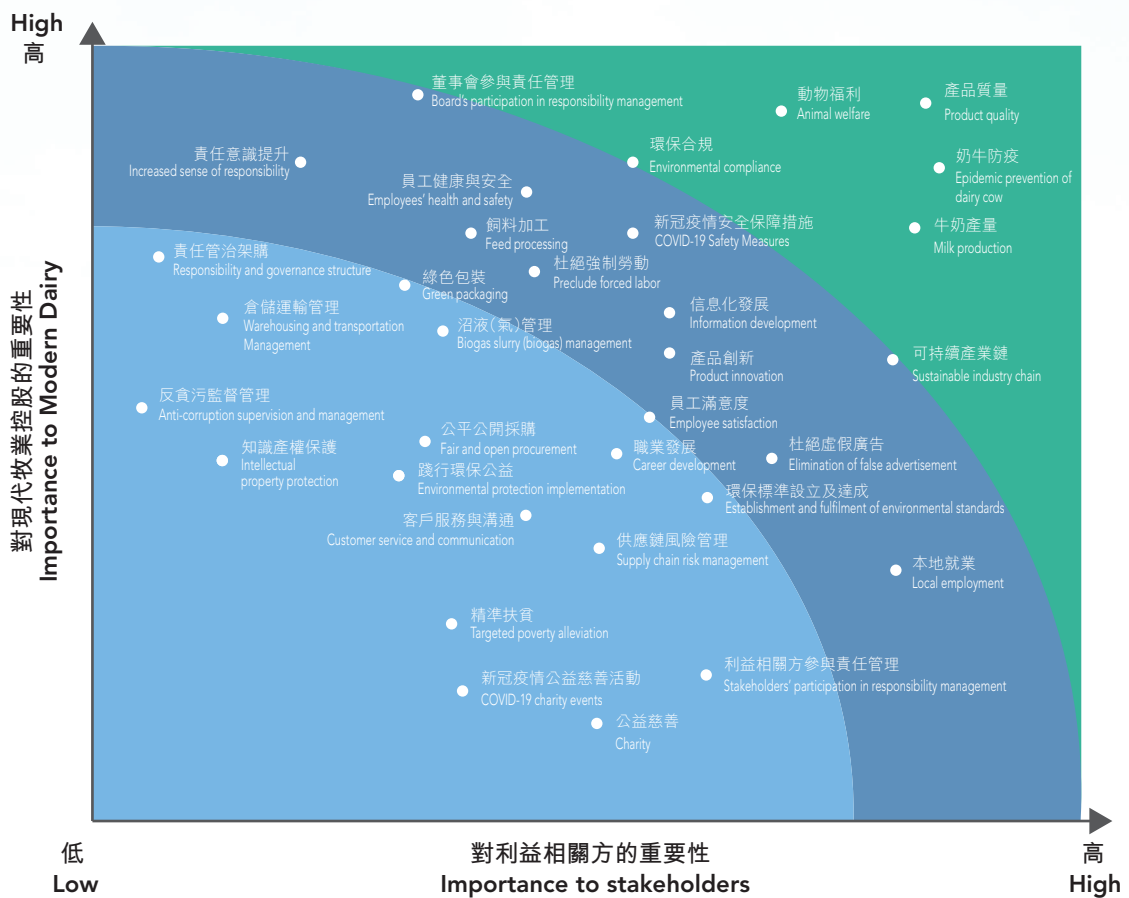
利益相關方 Stakeholders	期望與訴求 Expectations and Demands	溝通方式 Communication Mode	我們的回應 Our Response
員工 Employees	<ul style="list-style-type: none"> 保障員工權利及權益 Safeguard the rights and interests of employees 職業健康及安全 Occupational health and safety 改善員工福利 Improve employee benefits 平等就業機會及多元化發展 Equal employment opportunities and diversified developments 新冠疫情安全保障 Protection against COVID-19 	<ul style="list-style-type: none"> 勞動合同 Employment contract 信息平台 Information platform 諮詢電話與郵件 Hotline and email 內部月刊 Internal monthly magazine 投訴平台線上線下培訓交流 Online and offline training and exchange of complaint platform 	<ul style="list-style-type: none"> 堅持公平招聘 Insist on equal recruitment 開展員工培訓 Carry out training for employees 優化職業發展渠道 Optimize career development channel 開展員工活動 Carry out employee activities 充分聽取員工意見 Fully listen to all opinions of the employees 新冠疫情安全保障措施 Protection measures against COVID-19
供貨商／合作夥伴 Supplier/partner	<ul style="list-style-type: none"> 建立長期業務關係 Establish long-term business relationship 公平採購、誠信履約 Fair procurement and honest performance 產品質量保證 Product quality assurance 	<ul style="list-style-type: none"> 供應商評估 Evaluation of suppliers 實地考察 On-site visit 定期供應商會議 Regular supplier meeting 	<ul style="list-style-type: none"> 嚴格供應鏈管理 Strict supply chain management 嚴選牧場 Strict selection of farm 堅持公平公開的採購 Insist on fair and open procurement

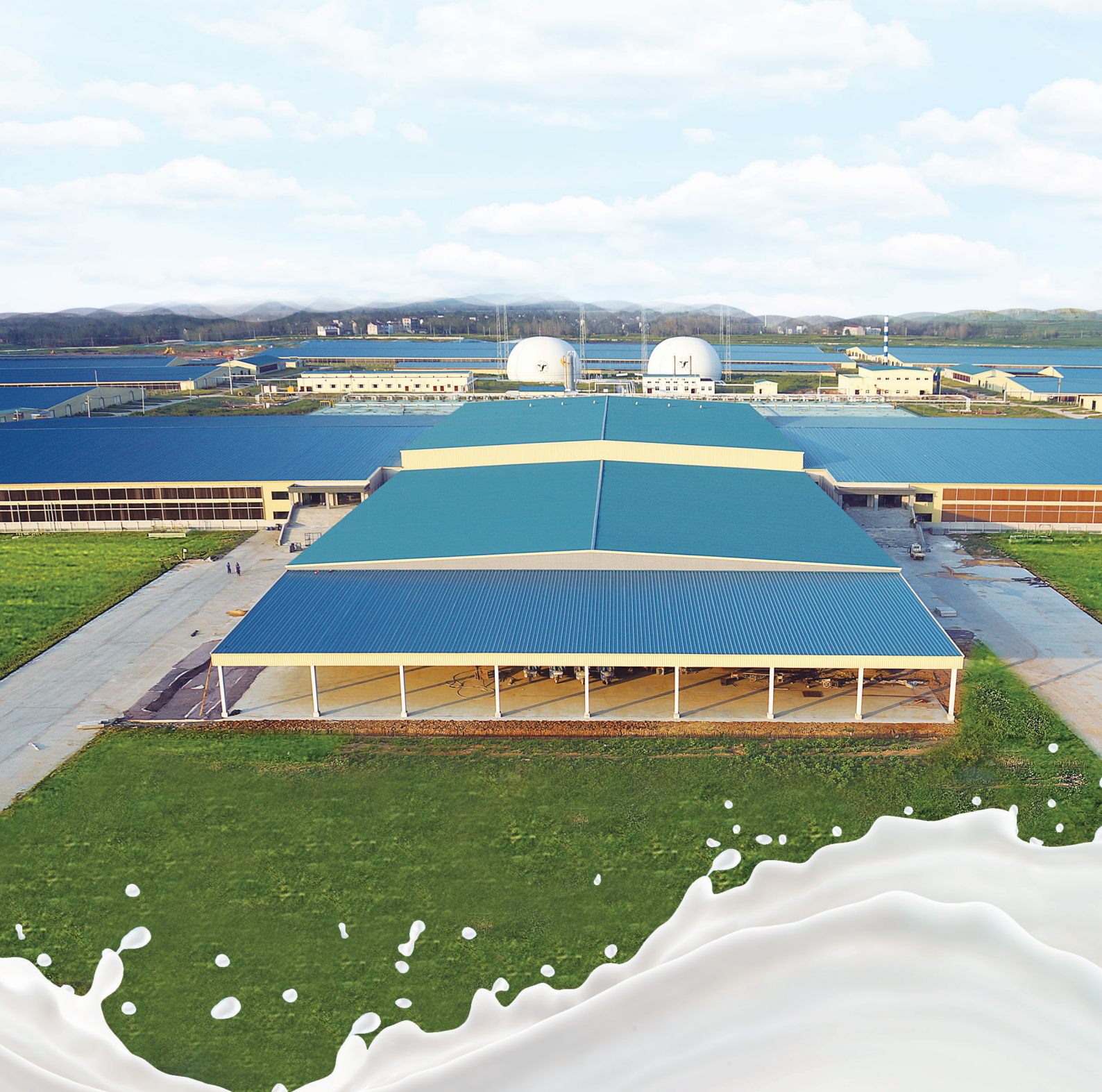
利益相關方 Stakeholders	期望與訴求 Expectations and Demands	溝通方式 Communication Mode	我們的回應 Our Response
環境 Environment	<ul style="list-style-type: none"> 堅持綠色運營 Insist on green operation 最小化環境影響 Minimize environmental impact 	<ul style="list-style-type: none"> 環境檢查 Environment inspection 環境信息披露 Environment information disclosure 倡導環保理念 Advocate the idea of environmental protection 堅持可持續發展 Insist on sustainable development 	<ul style="list-style-type: none"> 加強環境及生態保護 Strengthen environmental and ecological protection 堅持可持續發展道路 Insist on the path of sustainable development 病死牛嚴格管理 Strict management of dead cows due to disease 堅持倡導綠色生產辦公 Insist on advocating green production and office
社區 Community	<ul style="list-style-type: none"> 開展社會公益 Carry out public benefit activities 促進社區發展 Promote community development 新冠疫情公益慈善 Philanthropic efforts against COVID-19 	<ul style="list-style-type: none"> 了解社區需求 Understand community needs 制定社區服務規劃 Formulate community service plan 	<ul style="list-style-type: none"> 開展社會公益活動 Carry out public benefit activities 開展社區服務 Carry out community service 促進本地就業 Promote local employment 新冠疫情公益慈善活動 Philanthropic activities against COVID-19

- 實質性議題識別
Identification of Material Topics

公司針對相關ESG議題，與利益相關方溝通問卷實際情況，從議題對利益相關方的重要性及議題對環境和社會的重要性兩個維度出發，分別對與我們業務相關且重要的ESG事宜進行評估，篩選並形成實質性議題矩陣，作為本公司ESG關注及披露依據。

In respect of the relevant ESG issues, the Company evaluated the important ESG issues related to its business based on the results of its questionnaires with the stakeholders and in accordance with the importance of the issues to the stakeholders and that to the environment and society, and selected from them to form a matrix of substantive issues, making it the basis for its concern on and disclosure of the ESG issues.





01

智慧牧場 保護生態
Smart Farm for Ecological Protection

1. 智慧牧場 保護生態

Smart Farm for Ecological Protection

我們堅信只有深耕上游養殖，從源頭管理牧場環境、牧草質量，才能「養好牛」、「產好奶」。因此，我們高度重視牧場管理，積極應對氣候變化風險，致力於打造更智慧、更綠色的生態牧場。

We firmly believe that only through painstaking upstream cultivation and managing the pastoral environment and grass quality at source, can we “raise good cows” and “produce good milk”. As a result, we attach great importance to farm management, and actively deal with the risks of climate change, striving to turn ours into smarter and more eco-friendly farms.

1.1 智慧升級牧場

Upgrading to Smart Farms

現代牧業以數字賦能乳業新生態，重視牧場信息化建設，運行雲版本生產管理系統，實現牧場種植、奶牛養殖、奶源加工及消費者洞察的深度整合，使牧場體系的運營與技術可視化、流程操作標準化，完成傳統牧場的智慧轉型。

Modern Dairy attaches remarkable importance to the construction of IT infrastructure in its farms and digitally empowers the new ecosystem of the dairy industry by deeply integrating farming, cow breeding, milk processing with consumers' demand with the assistance of a cloud-based version of production management system, which has visualized the operation and technology of its farms, standardized its process operation, and accomplished the intelligent transformation of the traditional farms.

報告期內，全面統一管理平台－「一牧雲YIMU Cloud」系統已在集團內部全線上線完成。作為牧場的「智慧大腦」，「一牧雲」能夠將牧場數據進行整合、分析和預測，幫助牧場發現生產中存在的問題，並將解決方案植入一線生產流程，輔助一線實施，提高牧場工作效率，最終通過數據對方案和執行效果進行評估。

During the reporting period, the “YIMU Cloud” system, a fully unified management platform, was officially launched across the Group. As the “brain” of our farms, YIMU Cloud can integrate, analyze and predict farm data, helping us identify problems arising in our production, and embed solutions in the front-line production process to help us improve efficiency, and eventually conduct a final evaluation of the solution and its effect with the data.



生產管理 Production Management

- 100%完成生產管理系統一牧雲的切換；
- 實時查看各場的牛群信息。
- 100% completion of the switch to YIMU Cloud, a cloud-based production management system;
- Real-time monitoring of the herd information in each farm.

數字化牧場 Digital Farm



飼餵管理 Feeding System

- 100%完成精準飼餵系統上線使用；
- 整合數據，同標準衡量管控上料準確率，保障配方有效執行。
- 100% completion of the online launch of the precise feeding system;
- Integrating data, measuring and controlling the accuracy of feeding based on the same criteria to ensure effective recipe implementation.

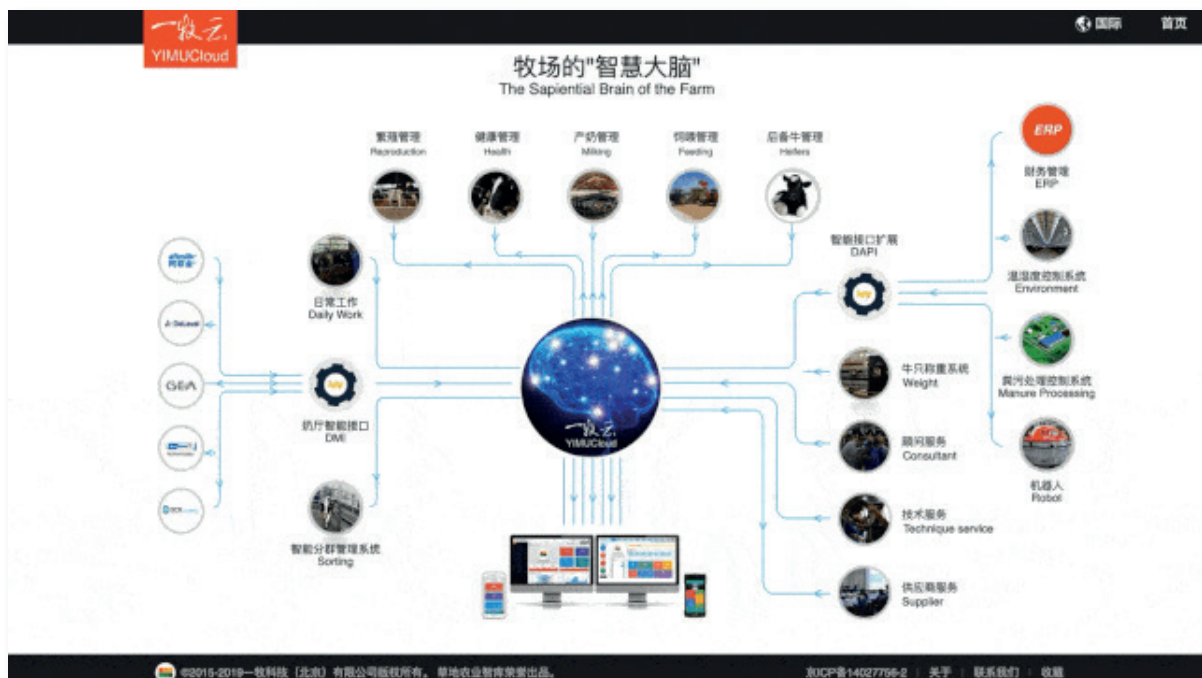
設備管理 Equipment Management

- 100%完成設備管理平台線上使用；
- 入庫、保養、維修、報廢等全面追蹤，多維對比分析。
- 100% completion of the online launch of the equipment management platform;
- Comprehensive tracking of inventory entry, maintenance, repair and disposal, with multi-dimensional comparison and analysis.

溫濕度管理 Humidity and Temperature Management

- 100%完成溫濕度設備的檢修整改；
- 確保熱應激期間設備及系統有效運行，24小時對牛舍溫濕度實時監控。
- 100% completion of repair and renovation of the temperature and humidity equipment;
- Ensuring effective operation of equipment and systems during the thermal stress, with real-time monitoring of barn temperature and humidity 24 hours a day.

護航原奶質量 Ensuring Quality of Raw Milk



DBI(數據分析)

DBI (Data Analysis)

- 實時監控全群牛頭數、成母牛懷孕率、乳房炎發病率、泌乳牛平均單產等；
Real-time monitoring of the number of cows in the herd, the pregnancy rate of adult females, the incidence of mastitis, and the average unit production of lactating cows;
- 高效管理牛群結構、繁殖管理、健康管理、飼餵管理、產奶管理、犢牛管理。
Efficient management of herd structure, reproduction management, health management, feeding management, milk production management and calving management.

DFeed(精準飼餵)

DFeed (Precise Feeding)

- 前端集綜合精準拌料、精準投料、剩料處理和庫存管理功能於一體；
The front end integrates precise mixing, precise feeding, leftover disposal and inventory management;
- 後端通過設備監控、實施評估、流程優化和數據分析對每隻牛定制適合自身狀況的餵養方法。
The back end customizes feeding method for each cow through equipment monitoring, evaluation, process optimization and data analysis.

DWeb(生產管理)

DWeb (Production Management)

- 整合不同牧場使用的發情監測、精準飼餵、溫濕度控制等系統來，打破牧場「信息孤島」，建立高效的信息採集體系；
Breaking the dilemma of our farms being isolated “Lone Information Islands” and establishing an efficient information collection system by integrating the systems for monitoring cows in heat, precise feeding, and temperature and humidity control used on our farms;
- 規範的牛群動態檔案，實現牛隻個體管理、群體管理、繁殖管理、精準飼餵管理、健康管理、產奶管理等；
With standardized dynamic herd file, we have realized individual cattle management, herd management, reproduction management, precise feeding management, health management, milk production management, etc;
- 依托健康管理，獸醫在診治牛隻時，可以結合參考歷史處方記錄進行電子處方錄入，確保處方用藥準確的同時，積極推行無紙化生產辦公。
With the help of health management, veterinarians will be able to write prescription electronically with reference to historical prescription records when treating our cattle, so as to ensure the accuracy of prescriptions and medication, while achieving paperless production and office work.

DSmart(移動應用)

DSmart (Mobile Application)

- 應用掃描棒掃描牛隻電子耳標進行同期處理，APP界面自動提示該頭牛隻所需處理方式，節省了人工尋找標記牛隻再按需操作的步驟，是實現高效管理的稱為「牛舍工作導航儀」。
With the so-called “Barn Navigator”, we use a scanning stick to scan the cattle’s electronic ear tags, and the APP will automatically suggest the required treatment, saving us from manual search for the target cattle, thus helping us achieve efficiency.

DWeight(智能稱重)

DWeight (Smart Weighing)

- 通過藍牙設備鏈接，自動記錄犢牛稱重數據，提高牛隻體重數據的準確性，避免人工錄入過程中可能產生的誤差。
By linking via Bluetooth devices, the weight data of calves are automatically recorded, which has improved accuracy and avoided possible errors arising in the manual recording process.



1.2 低碳綠色牧場

Low-carbon Green Farms

為響應國家號召減少耗能和排放，加速完成高耗能、高碳排放產業向節能環保、可再生能源產業的綠色轉型，現代牧業嚴格遵循運營所在地出台的《中華人民共和國環境保護法》《中華人民共和國大氣污染防治法》《中華人民共和國水污染防治法》《中華人民共和國水法》《中華人民共和國環境影響評價法》《中華人民共和國固體廢物污染環境防治法》等法律和《城鎮排水與污水處理條例》《水污染防治法實施細則》《消耗臭氧層物質管理條例》《建設項目環境保護管理條例》等行政法規，制定了現代牧業環保安全管理制度、危險廢棄物管理制度、環境監測、糞肥檢測管理制度等完善的環保制度體系，貫徹綠色發展理念、履行社會責任，打造生態牧場，為社會生態文明建設提供有力支持。

In response to our motherland's call to reduce energy consumption and pollutant emissions, and accelerate our transformation from a high energy-consuming and high carbon-emitting industry to an energy-saving and eco-friendly one fuelled by renewable energy, we closely follow the "Environmental Protection Law of the People's Republic of China", the "Atmospheric Pollution Prevention and Control Law of the People's Republic of China", the "Water Pollution Prevention and Control Law of the People's Republic of China", the "Water Law of the People's Republic of China", the "Law of the People's Republic of China on Environmental Impact Assessment" and the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste" and the administrative regulations and rules of the places where we operate, such as the "Regulations on Urban Drainage and Sewage Treatment", the "Detailed Rules for the Implementation of the Water Pollution Prevention and Control", the "Regulations on the Administration of Ozone Depleting Substances" and the "Regulations on the Administration of Construction Project Environmental Protection", and have developed a series of comprehensive environmental protection policies and rules, such as the Modern Dairy Environmental Safety Management System, the Hazardous Waste Management System, and the Environmental Monitoring and Manure Testing & Management System, as our efforts to promote the concept of green development, carry out our social responsibility, turn our farms into eco-friendly farms, and provide strong support for the construction of social ecological civilization.

報告期內，本公司未發生因環境違規而導致的訴訟及相應處罰。

During the reporting period, there was no litigation against or corresponding penalty imposed on the Company due to the environment.



1.2.1 開源：分類回收循環再生

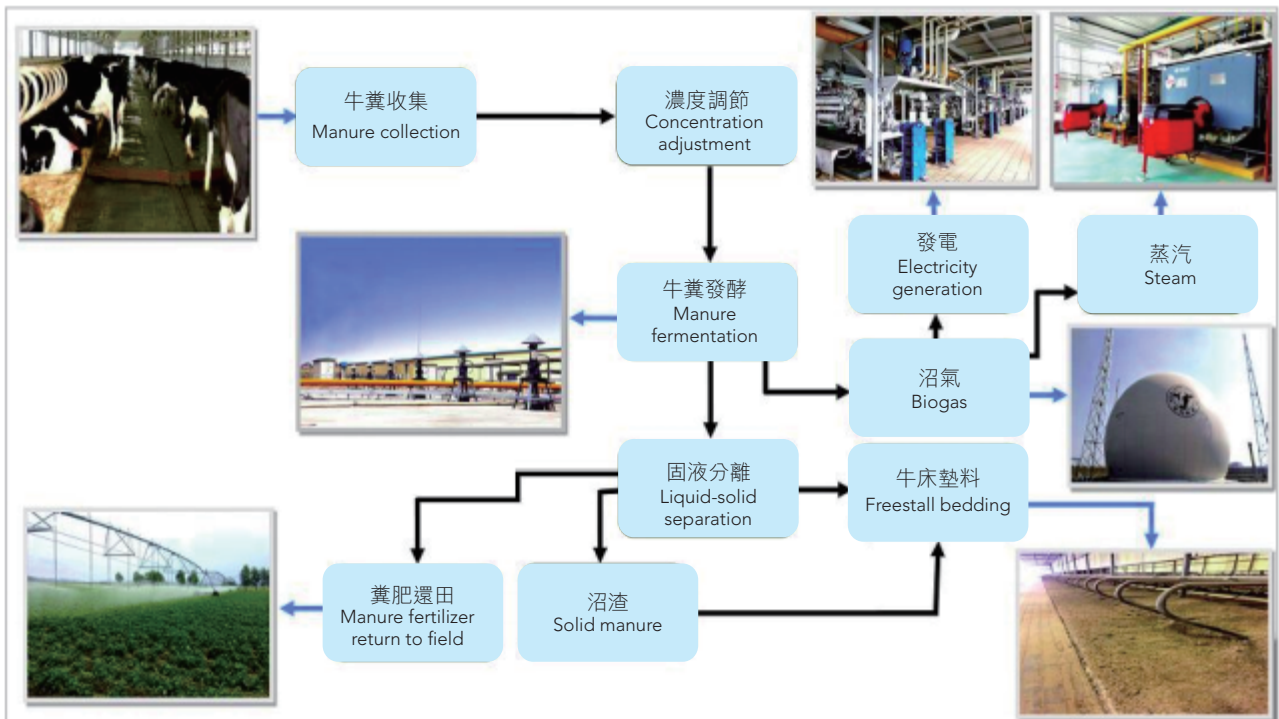
Opening Sources: Sorting and Recycling

現代牧業堅持發展「牛糞發酵－優質沼肥－青貯施肥－回購青貯」的生態農業循環經濟，在糞污處理模式上走出了一條環保、生態、效益相結合的創新之路，努力打造能源自給、資源循環利用的現代高效牧場。

Modern Dairy insists on developing an eco-agricultural economy featuring the cycle of “Cow Manure Fermentation – Quality Manure Fertilizer – Silage Fertilization – Silage Repurchase”, and has successfully paved an innovative way integrating environmental protection, eco-friendliness and profitability in manure treatment, with which we strive to build a modern and efficient farm with self-supply of energy and recycling of resources.

我們通過糞污中溫厭氧發酵無害化處理系統，以沼氣工程為紐帶，以產生的沼氣、沼液、沼渣處理利用為核心，將畜牧養殖與果、菜、茶生產及生態環境改善有機地結合、協同發展，實現養殖糞污無害化、減量化。報告期內，現代牧業共產生沼肥569.06萬立方米；沼氣發電2,630.63萬KWH，沼氣產生蒸汽39.23萬噸，產生沼渣192.90萬噸。

Our harmless manure treatment system featuring mid-temperature anaerobic fermentation links biogas engineering with its core function of treatment and utilization of the biogas, liquid manure and solid manure, and organically combines and synergizes livestock breeding with production of fruits, vegetable and tea and ecological environment improvement, aiming to realize harmless treatment and reduction of manure. During the reporting period, we produced a total of 5,690,600 cubic meters of manure fertilizer, generated electricity of 26,306,300 kWh with biogas, produced 392,300 tons of steam, and 1,929,000 tons of solid manure.



<p>沼氣發電 Biogas power generation</p>	<ul style="list-style-type: none">- 沼氣發電用於發電機組和沼氣鍋爐使用。發酵池產氣均勻穩定，發電機可實現並網發電； Biogas can be used in generator sets and boilers as the fermenter produces biogas steadily, and the generator can hook up with the national grid for power supply;- 沼氣鍋爐的蒸汽用於發酵池內盤管加熱、擠奶廳供熱和牛奶加工車間供熱。 The steam from the biogas boiler is used to heat the coils in the fermenter, to warm up the milking parlor and the milk processing plant.
<p>沼渣墊料 Solid manure bedding</p>	<ul style="list-style-type: none">- 發酵池出料經固液分離並達到指定的水分要求後，使用臥牀拋料車回填於牛舍內的臥牀； After the fermenter discharge is separated by solid and liquid and meets the specified moisture requirement, it is backfilled to the bed in the barn using a bedding thrower;- 通過定期翻創並補充沼渣來改善牛舍臥牀環境，其殺菌效果、舒適度及經濟成本遠遠優於其他墊料。 The bedding is regularly turned and replenished to improve the bedding condition, with its bactericidal effect, comfort and economic cost far better than other bedding materials.

糞肥還田
Manure fertilizer return to field

- 加大管道建設。2020年商河、蚌埠牧場通過當地政府投資、補貼高標準農田建設項目，分別鋪設管道13.2km、7.5km，每畝田地約可節本增效300元左右，每年可為公司節約糞肥拉運費100餘萬元，實現了以「田成方、土成型、渠成網、路相通、溝相連、土壤肥、旱能灌、澇能排、無污染、產量高」的標準安全施肥保量糧田建設；

Increasing investment in pipeline construction. In 2020, our Shanghe Farm and Bengbu Farm laid 13.2km and 7.5km of pipelines respectively with the investment of local governments and subsidies for high-standard farmland construction projects, which will be able to save them approximately RMB300 per mu of field and more than RMB1 million of manure hauling cost for the Company each year, representing the accomplishment of construction of the farmland which features “square plots, shaped earth, networked canals, connected road and ditches, fertilized soil, irrigation in case of drought, drainage in case of flood, no pollution, and high yield”;

- 推廣沼肥應用。我們採取龍頭企業加種植基地的運作模式，與週邊34家經營主體建立產業化聯合體，形成「牛－沼－草」生態循環生產模式，實現「化肥零增長目標」。公司成為國家級循環經濟龍頭企業，各牧場取得循環經濟龍頭企業稱號；

Promoting application of manure fertilizer. We have adopted an operation mode featuring “Industry Leaders plus Planting Bases”, under which we entered into industrial consortia with 34 surrounding entities to form an ecological cycle production model featuring “cattle – biogas – grass” with “zero growth in chemical fertilizer”, with made us a leader in the national circular economy, and all our farms were dubbed leading enterprises in circular economy;

- 運行實施糞肥還田APP。通過APP，進一步規範了土地資源、車輛手續等，做到糞肥還田農戶驗收、牧場人員監管的雙向管理，在糞肥產出、運輸、GPS定位、線上管理、按需施肥等環節形成閉環管理。

Running the “Manure Fertilizer Return to Field” APP. With the application, we further standardized the utilization of land resources and vehicle procedures, with a two-way control of the manure returned to field, i.e., receipt by farmer and supervision by farm staff, enabling closed-loop management of such processes as manure production, transportation, GPS positioning, online management, and fertilization on demand.

1.2.2 節流：節約資源精細使用

Consumption-reduction: Saving Resources for Rational Use

在持續探索的基礎上，現代牧業不斷完善能源、資源節約式管理體系，制定資源用量相關管控制度，持續提升節能減排措施，對生產設備改造升級，規範設備設施操作流程，減少對水、電、煤、柴油等資源的耗費。在管理監督層面，採取實時監測及月度評比等方式，增強各單位的節約意識，促進管理水平的提升。同時我們還開展了「世界水日」、「世界環境日」等主題環保活動，培養員工節能意識，將節能舉措貫徹落實到基層。

On the basis of continuous research, Modern Dairy persistently improved its energy and resource-saving management system with resource consumption control guidelines formulated to enhance its energy-saving and emission reduction efforts, while constantly upgrading its production equipment, standardizing the operation process of equipment and facilities, with the aim of reducing the consumption of water, electricity, coal, diesel and other resources. In terms of management and supervision, we have adopted real-time monitoring and monthly evaluation to enhance the awareness of energy saving of our employees and improve the management expertise of our affiliates. In addition, we organize themed activities such as the "World Water Day" and "World Environment Day" to enhance our employees' awareness of energy saving and implement energy-saving measures across our base-level affiliates.

2020年，通過優化升級設備等措施，節約資源能耗成效顯著。

In 2020, through such measures as optimization and upgrading of equipment, we achieved remarkable resource-saving and energy consumption effectiveness.





牧場風機、噴淋智能遙控開關改造

Intelligent remote control switch transformation for farm wind turbines and water sprinkle and shower facilities



在低溫、牛隻擠奶等特殊時期，員工需手動關閉風機，可能造成風機未正常關閉、浪費用電等現象。2020年，現代牧業將風機控制櫃加裝手機遠程控制模塊，在低溫及牛隻擠奶時，員工可以遠程遙控風機關閉，避免牛舍風機空轉浪費電能，方便員工操作。尚志牧場改造風機650台、汶上牧場改造風機845台、商河牧場改造風機1,040台、洪雅牧場改造風機1,344台，共投入2.1萬元，節約用電13.6萬元/年。

During special periods such as low temperatures and milking, it is necessary for employees to manually turn off the wind turbines, which may result in failure to turn off the wind turbines properly and waste of electricity, etc. In 2020, Modern Dairy has installed a mobile phone remote control module to the wind turbine control cabinet, which allows employees to turn off the wind turbine remotely during low temperature and milking to avoid wasting electricity by idle wind turbines in the cowshed and facilitate employees' operation. Shangzhi Farm, Wenshang Farm, Shanghe Farm and Hongya Farm have improved 650, 845, 1,040, 1,344 units of wind turbines, respectively, with a total investment of RMB21,000, saving electricity consumption of RMB136,000/year.



塞北區鍋爐改造

Boiler transformation in Saibei District



現代牧業塞北牧場四期原有兩台20噸鍋爐，為塞北二期、三期、四期牧場提供沼氣。由於供給管路長、沼氣損耗大、鍋爐大而用氣量小等因素，導致牧場沼氣供應不足，利用率低。2020年，現代牧業替換兩台20噸鍋爐，在塞北二期牧場、四期牧場新購三台6噸鍋爐，塞北三期牧場調撥一台鍋爐，大幅減少沼氣管道輸送的損耗，提升了沼氣和蒸汽的利用率，充分發揮鍋爐的效能，減少每年外購天然氣費用300多萬元，並利用節約的沼氣烘乾沼渣，預計每年節約燃料45萬元。

Modern Dairy Saibei Farm IV previously had two units of 20-tons boilers to provide biogas for Saibei Farm II, III and IV. As a result of factors such as long supply lines, large biogas losses, big boilers with little gas consumption, etc.; there is insufficient supply and low utilization of biogas in the farm. In 2020, Modern Dairy purchased three new units of 6-ton boilers in Saibei Farm II and IV to replace such two units of 20-tons boilers, and redeployed one boiler to Saibei Farm III, significantly reduced the loss of biogas in pipeline transmission and improved the utilization of biogas and steam, then utilized the entire effectiveness of the boiler, which in turn reduced the annual cost of purchased natural gas by more than RMB3 million, and is expected to save RMB450,000 per year through the utilization of the saved biogas to dry biogas residue instead of fuel.



奶廳轉盤節約用水

Water-saving from rotary plates in milking parlors

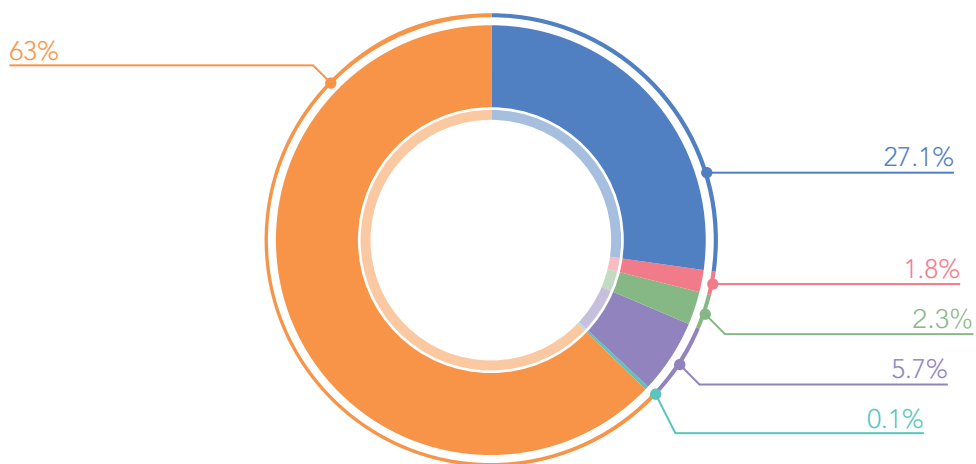


為進一步節約資源使用，2020年現代牧業針對牧場中生產設備進行了進一步分析，探索各生產環節的節約資源潛力。通過調研發現，擠奶大廳轉盤沖杯用水可進一步提升技術精度，實現精準沖杯，從而節約寶貴的水資源。2020年，我們在擠奶大廳安裝光電感應開關、電磁閥來控制沖杯水，每個杯組沖洗2秒，每個循環有50分鐘精準沖杯外加9分鐘連續沖杯，在保障沖洗效果的前提下，降低用水量。改造前轉盤沖杯水為長開狀態，到擠奶結束每班次轉盤平均用水9噸左右，改造後，轉盤單班次沖杯水用量為6噸，每班次節約3噸，全年可節約水量141,912噸。

To further save the use of resources, Modern Dairy has further analysed the production equipment in the farm in 2020 to explore the potential of saving resources in each production process. It was found from the research that the water used for cleaning rotary plates in milking parlors could be further improved by precise technology to achieve accurate cleaning, thus saving valuable water resources. In 2020, we installed photoelectric sensor switches and electromagnetic valves in the milking parlors to control the water used for cleaning plates. Each plate is cleaned for 2 seconds, and each cycle has 50 minutes of precise cleaning plus 9 minutes of continuous cleaning to reduce water consumption while ensuring the cleaning effect. The water used for cleaning rotary plates keep opening before the transformation, and the average water consumption used for cleaning rotary plates was about 9 tons per shift until the end of milking, and after the transformation, the water consumption used for cleaning rotary plates was 6 tons per shift, saved 3 tons per shift and 141,912 tons a year.

2020年現代牧業主要能源結構

Main Energy Structure of Modern Dairy of 2020



- 電力
Electricity
- 燃煤
Fuel coal
- 天然氣
Natural gas
- 柴油
Diesel
- 汽油
Gasoline
- 沼氣
Biogas

表：2020年現代牧業資源消耗量指標
Table: Energy Consumption Indicators of Modern Dairy of 2020

指標 Indicators	單位 Unit	2020年 2020	2019年 2019
外購用電總量 Total amount of outsourced electricity	萬千瓦時 Ten thousand kWh	28,207.35	25,481.34
燃煤 Fuel coal	萬噸 Ten thousand tons	0.33	0.44
天然氣 Natural gas	萬立方米 Ten thousand cubic meters	223.37	166.96
柴油 Diesel	萬升 Ten thousand liters	579.34	667.29
汽油 Gasoline	萬升 Ten thousand liters	16.67	21.11
沼氣消耗量 Biogas consumption	萬立方米 Ten thousand cubic meters	11,276.52	15,050.08
綜合能源消費總量 Total energy consumption	萬噸標煤 Ten thousand tons of standard coal	12.80	15.27
百萬營收綜合能源消費總量 Total energy consumption per million revenue	噸標煤／百萬元 Tons of standard coal/ million	21.25	27.69
用水總量 Total water consumption	萬噸 Ten thousand tons	959.93	988.75
百萬營收用水量 Water consumption per million revenue	萬噸／百萬元 Ten thousand tons/ million	0.16	0.18

註：2020年公司結合生產運營實際及監管要求，進一步優化了環境數據統計口徑及方法，並同步對往年數據進行了更新。

Note: In 2020, the Company further optimized the statistical caliber and method on environmental data, taking into account the actual and regulatory production and operation requirements, and updated the previous year's data simultaneously.



環保宣傳活動 Environmental Promotion Activities



為加強生態環境保護工作宣傳，提升全員環保意識，2020年，現代牧業舉辦「奏響環保主旋律，循環經濟牧業興」活動，切實開展環保活動，進一步幫助員工樹立節能環保理念。

In order to strengthen the promotion of eco-environmental protection and enhance the environmental protection awareness of all staff, Modern Dairy held the "Initiation of the main melody of environmental protection, the recycling economy flourishing dairy industry (奏響環保主旋律，循環經濟牧業興)" activity in 2020 to carry out environmental protection activities effectively and further help staff to develop the concept of energy-saving and environmental protection.

2020年3月22日「世界水日」，現代牧業為了喚起員工的節水意識，加強水資源保護，組織各單位舉辦世界水日宣傳，如「水十條」解讀培訓，制定節水海報宣傳頁進行發放，牧場餐廳、消毒室等地點張貼節水標識、牆壁粘貼節水標語等。

Modern Dairy organized the World Water Day promotion activities at each entity on March 22, 2020 (the "World Water Day"), aiming to raise the water conservation awareness of its staff and strengthen the water resources protection, such as training on the interpretation of the "Ten Water Principles (水十條)", preparation of water conservation posters and distribution the same, posting of water conservation signs and slogans on the walls of the dining hall and disinfection room of the farm, etc.



「水十條」解讀培訓 節水宣傳海報 節水標語

Training on the interpretation of the "Ten Water Principles (水十條)", water-saving poster and water-saving slogans

2020年6月5日「世界環境日」，現代牧業以「美麗中國，我是行動者」為主題開展活動。各牧場根據當地實際工作需求，並結合當地政府要求，分別開展環保月、環境日街頭以及村鎮走訪宣傳、發放宣傳單、張貼宣傳頁、集中培訓等一系列活動。

Modern Dairy carried out activities under the theme of "Beautiful China, I am a participant (美麗中國，我是行動者)" on June 5, 2020 (the "World Environment Day"). According to the actual local work demands and in conjunction with local government requirements, each farm conducted a series of activities such as environmental month, street and village promotion on environmental day, leaflets distribution, posters posting, and centralized training.



「世界環境日」街頭宣傳及集中培訓

Street promotion and centralized training on "World Environment Day"

1.2.3 減排：綠色生產環保排放

Emission Reduction: Green Production and Environmental Emission

現代牧業主要排放物包括各項能源使用產生的溫室氣體，因煤炭燃燒產生的 NO_x 、 SO_2 、煙塵等氣體，牧場醫療垃圾、化學試劑等危險廢棄物。針對養牛產生的沼液、沼氣及沼渣，公司積極響應國家綠色發展號召，謹慎對待溫室氣體排放對環境造成的影響，將其作為高循環利用價值的資源，要求得到充分利用。

Major emissions of Modern Dairy included greenhouse gas from the use of various energy resources, gas emissions such as NO_x , SO_2 and soot from burning of coal and hazardous waste such as medical waste and chemical reagent of the farm. For the biogas slurry, biogas and biogas residue from cow farming, the Company actively responded to the national call for green development, carefully dealt with the impact of greenhouse gas emissions on the environment, and used them as resources with high recycling value and required full utilization of such resources.

2020年為推進環保排放，現代牧業積極開展固體廢棄物專項治理行動，按需定點完成鍋爐尾氣系統的脫硫改造升級，並對尚志牧場的燃煤鍋爐進行全面取締，同時委派環境影響評價機構檢測安環數據，實現內外雙重防控。此外，現代牧業(汶上)有限公司環境管理體系也於2020年3月完成QES體系認證，整體認證過程不僅加強了牧場安環相關危險源的系統辨識，而且通過體系外審工作明確了公司未來開展環保相關工作的路徑清單。

To promote environmental protection emissions, Modern Dairy actively implemented a special treatment initiative for solid waste in 2020, completed the upgrading of the desulfurization of the boiler exhaust system on a need-to-know basis, and replaced all coal-fired boilers at Shangzhi Farm, while at the same time engaged environmental impact assessment agencies to test the security and environment data to achieve prevention and control both inside and outside. In addition, the environmental management system of Modern Farming (Wenshang) Co., Ltd. (現代牧業(汶上)有限公司) has also passed the QES system certification in March 2020, during the overall certification process, not only strengthened the systematic identification of security and environment-related hazards source in the farm, but also defined its future approach of carrying out environmental protection-related work through the external audit of the system.

報告期內，我們採取多項措施減少排放，踐行環保責任：

During the reporting period, we took a number of measures to reduce emissions and implement our environmental responsibilities:

<p>減少溫室氣體排放 Reduction of greenhouse gas emission</p>	<ul style="list-style-type: none">- 使用生物質能源替代熱值低、溫室氣體排放高的舊能源； Use biomass energy instead of old energy with low heat and high greenhouse gas emission;- 積極進行綠化建設，減緩運營過程中的溫室氣體排放。 Proactively carry out green construction to mitigate greenhouse gas emissions during operation.
<p>減少廢氣排放 Reduction of exhaust emission</p>	<ul style="list-style-type: none">- 對來自牛舍、沼氣站和供熱鍋爐等單元的廢氣經處理後達標排放，並積極進行資源化利用，減少排放；同時，逐漸關閉燃煤鍋爐，用更清潔高效的燃氣鍋爐替代，並逐步提高對沼氣的利用水平。- Discharge exhaust gas from units such as cowsheds, biogas stations and heating boilers after treatment and meeting the emission standard; as well as actively promote resource utilization efficiency and reduce emissions; meanwhile, shut down coal-fired boilers gradually and replace them with cleaner and more efficient gas-fired boilers and improve the utilization level of biogas gradually.
<p>減少無害廢棄物排放 Reduction of discharge of non-hazardous waste</p>	<ul style="list-style-type: none">- 將燃煤鍋爐灰渣填平牧場道路或場地坑窪的部分； Fill the roads or potholes of the farms with Coal-fired boiler ash;- 對廢水全部內部循環使用，減少排放；對於生活污水，我們經過中水站處理後用於牛舍清洗、灌溉、降溫等；對於牛舍用水，我們將其並入糞道，稀釋沼液，與沼液一同發酵。 Recycle all wastewater internally to reduce discharge; use domestic sewage after treatment by the reclaimed water station for washing cowshed, irrigation and cooling, etc.; cowshed water flows into the dung channel to dilute the biogas slurry and be fermented with the biogas slurry.

減少有害廢棄物排放
Reduction of discharge of
hazardous waste

- 我們規定了醫療垃圾及化驗所用試劑瓶儲存標準，建立了廢棄物台賬並向環保部門備案，並將有害廢棄物交予具有資質的處理單位進行集中處理；
Specify storage standards for medical wastes and reagent bottles used for the test, prepare the waste report and submit to the environmental protection department for record and deliver hazardous wastes to qualified treatment units for centralized treatment;
- 制定並實施《廢油回收管理制度》，將廢油料交由具有回收資質的公司妥善處理；
Formulate and implement the “Waste Oil Recycling Management System” and deliver waste oil to companies qualified for recycling for proper treatment;
- 對於病死及病害牛，我們嚴格遵照《中華人民共和國病死及死因不明動物處置辦法》及農業部《病死及病害動物無害化技術規範》等，按照處理流程標準，進行相應方法的處置，防止對環境造成危害以及被惡意利用。
Dispose cows dying from disease and sick cows strictly in accordance with the “Measures for Treatment of Dead Animals due to Disease and for Unknown Reasons of the People’s Republic of China” and the “Technical Specification for Harmless Treatment of Dead Animals due to Disease and Sick Animals” of Ministry of Agriculture and according to the standard treatment process and corresponding method to prevent damage to the environment and malicious use.

表：2020年現代牧業排放物指標
Table: Emission indicators of Modern Dairy of 2020

指標 Indicator	單位 Unit	2020年 2020	2019年 2019
主要危險廢棄物產生量 Production of major hazardous waste	噸 tons	146.69	397.92
百萬營收主要危險廢棄物產生量 Production of major hazardous waste per million revenue	噸/百萬元 ton/million	24.37	72.17
病死牛無害化處理牛 Harmless disposal of cows died due to diseases	頭 heads	14,464	15,109
廢氣中NO _x 排放量 NO _x emissions in exhaust gas	噸 tons	119.39	156.77
廢氣中SO ₂ 排放量 SO ₂ emissions in exhaust gas	噸 tons	64.66	86.04
廢氣中煙塵排放量 Soot emissions in exhaust gas	噸 tons	0.45	0.60
溫室氣體排放總量 Total emissions of greenhouse gas	tCO ₂ e	929,486.96	955,143.61
溫室氣體範圍一排放量 Emissions of greenhouse gas (scope I)	tCO ₂ e	746,684.94	782,103.74
溫室氣體範圍二排放量 Emissions of greenhouse gas (scope II)	tCO ₂ e	182,802.02	173,039.87
百萬營收溫室氣體排放量 Emissions of greenhouse gas per million revenue	tCO ₂ e/百萬元 tCO ₂ e/million	154.39	173.22

註：2020年公司結合生產運營實際及監管要求，進一步優化了環境數據統計口徑及方法，並同步更新了往年數據。

Note: In 2020, the Company further optimized the statistical caliber and method on environmental data, taking into account the actual and regulatory production and operation requirements, and updated the previous year's data simultaneously.



2020年固體廢物專項治理行動 Special treatment initiative for solid waste in 2020



現代牧業為貫徹落實《中華人民共和國固體廢物污染環境防治法》及國家相關污染防治要求，結合《蒙牛集團固體廢物管理制度》，進一步強化公司固體廢物環保管理工作，梳理固體廢棄物環保管理短板，開展危險廢棄物治理專項排查，找出薄弱環節並開展整改措施，現代牧業組織各個單位於2020年10月30日到11月15日組織開展固體廢物專項治理行動。此次行動全面摸清了固體廢物環境污染源與風險點底數，層層檢視牧場危廢所面臨的固體廢物環保管理問題並集中解決，同時提高了各牧場生態環保管理意識和工作水平，為公司生態環保高質量發展鋪就綠色通道。

In order to implement the “Law of the People’s Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste” and related national pollution prevention requirements, together with the “Solid Waste Management System of Mengniu Group”(《蒙牛集團固體廢物管理制度》), Modern Dairy further strengthened the solid waste environmental management efforts, sorted out the weaknesses of the solid waste environmental management, carried out a special investigation into the hazardous waste management, identified the weaker area and conducted rectification measures. Modern Dairy organized each unit to carry out a special treatment initiative for solid waste from October 30 to November 15, 2020. Such initiative has comprehensively figured out the bottom figures in respect of solid waste environmental pollution sources and risks, inspected the solid waste environmental management issues regarding hazardous wastes faced by the farm at all levels and come to a centralized solution, meanwhile improved the ecological and environmental management awareness and working level of each farm, laying a green channel for the high-quality development of ecological and environmental protection of the Company.



1.3 應對氣候變化

Responding to Climate Change

氣候變化是21世紀人類面臨的嚴峻挑戰。為規避氣候變化及其他環境、社會風險對社會發展及牧場日常生產運營帶來的風險，現代牧業將氣候變化、環境污染、生態保護等方面納入風險考量維度，並下發《現代牧業關於加強春季安全風險防控工作的通知》《現代牧業安環中心關於做好環保安全、防洪防汛預警工作的通知》《現代牧業安環中心設備能源中心關於下發〈現代牧業防汛抗洪應急管理指導書(試行)〉的通知》《關於做好大風降溫降雨風險防控工作的通知》等相關文件，持續加強牧場運營面臨的環境和社會風險的前瞻預警。

Climate change is a major challenge experienced by mankind in the 21st century. In order to prevent the risks brought by climate change and other environmental and social risks to social development and daily production and operation of the farm, Modern Dairy has incorporated climate change, environmental pollution and ecological protection into the risk consideration scope and issued "Modern Dairy's Notice on Strengthening Safety and Risk Prevention and Control in Spring" (《現代牧業關於加強春季安全風險防控工作的通知》), "Modern Dairy's Security and Environment Center's Notice on the Work of Environmental Protection and Security, Flood Control and Early Warning" (《現代牧業安環中心關於做好環保安全、防洪防汛預警工作的通知》), "Modern Dairy's Security and Environment Center- Equipment and Energy Center's Notice on the Issuance of the "Modern Dairy Flood Control and Emergency Management Guidebook (for trial implementation)" (《現代牧業安環中心設備能源中心關於下發〈現代牧業防汛抗洪應急管理指導書(試行)〉的通知》) and "Notice on the Prevention and Control of High Wind, Lower Temperature and Rainfall Risks" (《關於做好大風降溫降雨風險防控工作的通知》) and other related documents to constantly strengthen the early warning of environmental and social risks faced by farm operations.



1.3.1 災害防控

Disaster Prevention and Control

結合春季火災、大風、雷雨等災害頻發的季節因素，現代牧業為保證集團生產經營活動的正常開展，結合疫情防控、復工復產期間安全生產工作實際需要，對防火、防大風、防雷防汛三類重點風險進行了部署工作。

Taking into account the seasonal factors of fire, high wind, thunderstorm and other disasters in spring, in order to ensure the normal production and operation activities of the Group, Modern Dairy has deployed works against the three key risks of fire, high wind and lightning and flood prevention, in combination with the epidemic prevention and control and actual work requirements of safety production during the resumption of work and production.



防火 Fire prevention

- 專項檢查
- 五級檢索
- Specialized inspection
- Five levels of retrieval



防風 Wind prevention

- 拆除有倒塌風險的廢棄建築
- 監控異常天氣提示員工出行安全
- Demolition of abandoned buildings with risk of collapse
- Monitoring abnormal weather conditions to remind employees to stay safe when going out



防雷 Lightning prevention

- 出台《防雷減災管理辦法》
- 定期檢測防雷裝置
- Issuance of "Lightning Prevention and Disaster Mitigation Management Measures" (《防雷減災管理辦法》)
- Regular inspection of lightning prevention devices



防汛 Flood prevention

- 檢修排水系統及漏雨漏水點
- 確保建築基礎無空洞、散水無塌陷
- Inspection and maintenance of the drainage system and water leakage spots
- Ensuring there are no empty holes in the building foundation and no collapses of apron

此外，針對2020年10月份全國多地大幅降溫，內蒙古中東部、華北北部等地陣風，安徽中部、江蘇南部等地局地暴雨等氣候驟變現象，現代牧業安環中心依據公司生產區域分佈及運營地當前風險等級從大風、降溫、降雨、出行四個方面編製了15條防控要求，並設置相應獎懲機制，促進員工層層落實氣候變化預警防控。

In addition, in response to the sudden climate changes in October 2020, such as significant temperature drops in many regions of the country, gusty in central-eastern Inner Mongolia and northern part of Northern China, and rainstorm in central Anhui and southern Jiangsu, Modern Dairy's Security and Environment Center has prepared 15 prevention and control requirements based on the Company's production distribution and the current risk level of its operational location from four aspects: high winds, temperature drops, rainfall and travel, and set up corresponding reward and punishment mechanisms to promote the implementation of climate change warning and prevention and control at all levels.

1.3.2 牛隻應激應對

Responding to Cow Stress

熱應激是最常見的牛群應激反應，會導致奶牛夏秋兩季產奶量和繁殖率下降。為緩解和減少熱應激對奶牛的危害，現代牧業從改善奶牛養殖環境和提高奶牛飼養技術等方面着手，降低高溫對奶牛的影響。2020年，我們進一步健全牛舍降溫系統，為奶牛創造良好的生存環境，阻斷外部熱源進入牛舍和運動場，同時促進牛舍內熱量和水分向外排出。我們在採食區、待擠廳、擠奶廳和專門的降溫工作間都依據科學的密度安裝噴淋降溫系統和風機，並根據實際調整使用情況；此外，我們還不斷調整飼料結構和飼餵技術，盡量減少或抑制與產奶無關熱量的產生。

Heat stress is the most common herd stress reaction, which would lead to a decrease in milk production and reproduction rate of cows in summer and autumn. In order to alleviate and reduce the danger of heat stress on cows, Modern Dairy has been working to reduce the impact of high temperatures on cows by improving the cow breeding environment and enhancing cow feeding techniques etc. In 2020, we further improved the cooling system of the cowshed to create a good living environment for cows, blocked external heat sources from entering the cowshed and movement field, and at the same time facilitated the heat and moisture discharge from the cowshed to the outside. We have installed water spray cooling systems and wind turbines in the feeding area, cows' waiting parlors, milking parlors and specialized cooling workshops according to scientific densities and adjusted their usage status according to the actual situation; in addition, we have been constantly adjusted the feed structure and feeding techniques to minimize or curb the generation of heat unrelated to milk production.



02

以牛為本 健康成長
Cows-oriented, Safeguarding its Health
and Growth

2. 以牛為本 健康成長

Cows-oriented, Safeguarding its Health and Growth

我們始終高度重視「動物福利」保護，堅持「以牛為本」的養殖理念，努力為奶牛建立良好的生長環境，為其茁壯成長保駕護航。我們堅信，只有「養好牛」，才能保障奶源安全「產好奶」，打造比肩國際品質的中國好牛奶。

We always place great importance on the protection of “animal welfare”, adhere to the “cow-oriented” breeding concept, and strive to establish a good growing environment for the dairy cows, to protect their growth. We firmly believe that only by “breeding good cows” could ensure the safety of milk source and “producing good milk”, establishing good Chinese milk with international quality.

2.1 環境及行為福利

Environmental and Behavioural Welfare

2.1.1 全封閉恒溫牛舍

Fully-closed and Regular Temperature Cowshed

現代牧業引進強通風空調系統打造最先進的全封閉恒溫牛舍，配備風扇、風機、水幕、噴淋全套降溫措施，保持牛舍內水的清潔充足和電的穩定供應：

Modern Dairy introduced strong conditioning system to build the most advanced fully-closed and regular temperature cowshed, equipped with fans, wind turbines, water curtains, water sprinklers and shower facilities, a full set of cooling measures to keep clean water sources and steady electricity supply in the cowshed:

- 在奶牛房間新風系統一側設置水幕濕簾揮發吸熱、一側設置負壓風機抽風，保證牛舍空氣流通、加濕降溫；
Cool water curtain was installed on a side of the fresh air system of cowshed for evaporating and absorbing heat, while negative-pressure air fan was installed on the other side for venting out the water vapour, to ensure the air exchange between cowshed and the outside areas, achieving humidifying and cooling effect;
- 在趕牛通道安裝大風機，增加通風換氣；
Big wind turbines were installed in the aisles so as to facilitate the air exchange;
- 在待擠區安裝噴淋裝置，清潔的同時保持奶牛體溫；
Water sprinkle and shower facilities were installed in cows' waiting hall to clean dairy cows up and maintain their stable temperature at the same time;
- 針對酷暑時期奶牛的熱應激反應，改造投資熱應激設備，使奶牛感受「清涼一夏」。
For the heat stress reaction of cows in summer, transform and invest in heat stress equipment to make cows feel “cool in summer”.



牛舍新風系統
Fresh Air System of
the Cowshed

大風機
Big wind turbines

噴淋裝置
Water sprinkle and
shower facilities

水源清潔、
電力供應穩定
Clean Water Sources and
Steady Electricity Supply

2.1.2 全消毒清潔牛舍 Cleaning and Disinfecting the Cowshed Completely

我們注重加強牛舍環境的清潔與消毒，採取多項措施保障牛舍衛生安全：

We pay attention to strengthen the cleaning and disinfection of the cowshed environment and take a number of measures to ensure the hygiene and safety of the cowshed:

- 每天對牛舍(包括但不限於產房、病牛舍)進行至少1次噴霧消毒；
Cowshed (which included but not limited to delivery rooms and shed for sick cow) was subject to at least 1 spray disinfection per day;
- 各牧場常備兩種以上消毒藥品，每週交替使用，並填寫「牧場消毒記錄」；
Every farm should always keep more than two disinfectants in place and use them alternately every week and fill the "Disinfection Record of Farm";
- 牧場依據發病情況、空氣濕度、通風等情況制定牧場消毒程序，經技術支持中心審批後執行。
Farms personnel could formulate a farm disinfection system based on the incidence rate, humidity and ventilation, while the system would be subject to the approval of technical support center.

2.1.3 「犢牛別墅」－犢牛島的建設

Construction of "Heifers' Villa"-Heifers' Hut

我們為初生的小奶牛建設專屬犢牛島，為新生犢牛提供舒適環境，配備營養師、管家、醫生，全方位呵護犢牛健康成長：

We have built a special heifers' hut for new-born calves, providing a comfortable environment for them and arranged nutritionists, keepers and doctors to take care of the healthy growth of heifers in an all-round way:

- 新生犢牛使用單欄養殖，墊草一牛一清、現墊現放，空欄時鋪灑乾粉消毒劑保持臥牀地面乾燥、避免細菌滋生；
New-born heifers are fed in an individual stall, with bedding grass cleared from one cow to the next, then laid with fresh, and dry powder disinfectant spread when the stall is empty to keep the bedding ground dry and avoid bacterial growth;
- 營養師根據犢牛所處階段製作營養餐，確保飲奶、飲水定時、定量、定質、定溫；
Nutritionists make nutritious meals according to the growth stages of the heifers, ensuring that milk and water are drunk at regular intervals, in the right quantity, with the right quality and at the right temperature;
- 管家對每間牛舍定期消毒、通風換氣、根據犢牛生長階段和當季氣候決定墊料種類和厚度，確保臥牀柔軟乾淨、房間冬暖夏涼；
Keepers regularly disinfect and ventilate each stall, and determine the material and thickness of the bedding according to the growth stages of the heifers and the seasonal climate, ensuring that the bedding is soft and clean, and the rooms are warm in winter and cool in summer;
- 醫生實時監控牛犢健康、預防疾病，做好乳房清潔預防乳炎、定期修蹄預防蹄病；
Doctors monitor heifers health in real time, prevent diseases, perform proper cleaning works to prevent mastitis and regular hoof trimming to prevent hoof diseases;
- 每月測完犢牛生長指標後牧場會按照牛隻體格大小調群，按需進行分群管理。
Our farm adjusts the herd according to the size of the heifers after testing the cow growth indicators each month, and manages the herd according to the needs.



2.2 生理及心理福利 Physiological and Psychological Well-being

2.2.1 飼料質量管理 Raw Forage Quality Management

01 入場原料質量安全 Quality and safety of incoming raw forage

- 對到場原料進行合規性檢查；
- 由專業品控採樣人員依據《現代牧業品控中心原料質量控制操作指導書》現場進行感官驗收；
- 對接受使用的原料進行現場取樣，依據《現代牧業品控中心原料檢測計劃》進行衛生指標檢測。
- The compliance examination on incoming raw forage would be conducted;
- Professional quality control sampling staff would conduct sensory examination according to the "Guidance on Raw Forage Quality Control Operation of Modern Dairy Quality Control Center";
- The accepted raw forage would undergo an on-site sampling and the selected raw forage would undergo the hygienic indicators inspection based on the "Raw Forage Examination Plan of Modern Dairy Quality Control Center".

02 飼餵原料質量安全 Quality and safety of raw forage for feeding

- 開展飼餵道TMR日糧感官檢測，定期進行衛生清潔，保障飼料質量安全。
- Conduct sensory examination of TMR diets in feeding lanes, and carry out regular hygiene cleaning to ensure the quality and safety of raw forage.

03 庫存原料質量安全 Quality and safety of raw forage in storage

- 定期進行監測，並開展留樣、標識、保存工作，同時及時對臨期物料進行預警，避免過期原料影響奶牛健康。
- Carry out regular monitoring, sample retention, labeling and preservation, and timely issue early warning of raw forage close to expiration, so as to avoid the negative impact of expired raw forage on cow health.

2.2.2 飼料配方設計

Feed Formulation Design

現代牧業選用基於康奈爾大學淨碳水化合物淨蛋白質體系(CNCPS)研發的CPM-Dairy奶牛配方設計軟件，根據奶牛的生產特性、泌乳性能、生長性能及乾物質採食量，通過不同原料之前的營養物質組合效應，分配各種原料的使用量，確保日糧配方中含有奶牛集體所需的全部營養物質，以滿足奶牛高效生產的需要。牧場嚴格按照營養中心下發的飼料配方執行，做好牛群配料表，按照配料表製作TMR(全混合日糧)，最終根據奶牛各項指標的監測結果，及時調整飼料配方和推料頻次。

The CPM-Dairy formula design software, based on the Cornell University Net Carbohydrate and Protein System (CNCPS), is used by Modern Dairy to determine the amount of various raw forage used based on the milk production characteristics, lactation performance, growth performance and dry feed intakes of cows, as well as the effect of the previous combination of nutrients of different raw forage, to ensure that the diet formula contains all the nutrients required by cows collectively to meet the needs of cows for efficient milk production. The farm strictly follows the feed formulas issued by the nutrition center, prepares the cow ingredient list, makes the TMR (total mixed ration) according to the ingredient list, and eventually adjusts the feed formulas and the frequency of feeding in a timely manner according to the monitoring results of various cow indicators.

2.2.3 精準飼餵技術

Accurate Feeding Technology

牧場將擬定好的飼餵配方按照實際需求輸入Feedwatch、科湃騰或DFeed等自動飼餵系統，由中控室指揮自走式TMR車或司機完成放料、撒料、清理等一系列工作，確保飼料均勻的鋪撒在標識範圍內的採食道上，保證奶牛由專業人員按照規定送料時間準確投餵。

The intended feed formulas are inputted into an automatic feeding system of our farms, such as Feedwatch, Kopartner or DFeed. The central control room can direct the self-propelled TMR vehicle or driver to complete a series of tasks such as discharging, spreading and cleaning, ensuring that the feed is spread evenly on the marked feeding lanes and that the cows are fed accurately by the professional staff at the prescribed feeding time.

2.2.4 先進的繁育理念

Advanced Breeding Concepts

現代牧業與國際知名育種公司開展戰略合作，依據每個牧場不同特點制定牧場指數，針對未來乳業需求方向通過基因檢測選擇性狀優良的奶牛嘗試凍精、選配、胚胎移植等胚胎品種改良項目，最大限度發揮遺傳潛力，精心打造自有核心奶牛群，實現奶牛從選種、選配、妊娠、分娩及培育等階段的全鏈條管理。

Modern Dairy has developed strategic cooperation with internationally renowned breeding companies to develop a farm index based on the different characteristics of each farm. According to the needs of the dairy industry in future, we select the cows with excellent traits through genetic testing to try out the embryo breed improvement projects, such as sperm freezing, mating selection and embryo transfer, to maximize the genetic potential and carefully build up our own core dairy herd, so as to realize the full chain management of cows from breeding, selection, gestation, delivery and breeding.

2.3 健康及安全福利 Health and Safety Welfare

2.3.1 奶牛安全防疫 Dairy Cow Safety and Epidemic Prevention

現代牧業嚴格遵循《中華人民共和國動物防疫法》《中華人民共和國動物檢疫管理辦法》相關規定，在實現奶牛養殖集約化、規模化的同時，促使奶牛防疫工作日趨標準化、體系化。我們秉承對行業負責「以防為主，防重於治」的防疫理念，制定遵守《防疫管理制度》《人員防護管理制度》《牧場出入口管理制度》及《消毒室管理制度》。

Modern Dairy strictly adheres to the relevant requirements of the “Animal Epidemic Prevention Law of the People’s Republic of China” and the “Management Measures for Animal Quarantine of the People’s Republic of China”. We are promoting the standardization and systematization of epidemic prevention of dairy cows while realizing the intensified and scaled development of cows breeding. We are committed to the epidemic prevention philosophy of “attaching more importance to epidemic prevention than treatment”, and have formulated and complied with the “Epidemic Prevention Management System”, the “Staff Protection Management System”, the “Farm Entrance and Exit Management System” and the “Disinfection Room Management System”.

牧場員工
Staff on farms

- 規範了出入牧場和不同生產區域人員的防護標準和車輛的消毒標準，參照國家勞動防護用品發放標準、根據工種發放職業衛生防護用品，並為員工提供定期免費職業健康體檢、建立職業健康監護檔案；
We have standardized the protection standards for the persons entering and leaving our farms and different milk production areas and the disinfection standards for vehicles. We distribute occupational health protection equipment based on job types and in accordance with the National Standards for Issue of Labour Protection Equipment, provide occupational health check-ups for employees free of charge regularly, and establish the occupational health monitoring files for them;
- 牧場防疫小組定期抽查牧場各項防疫工作的執行情況，確保各項防疫工作落地；
Our epidemic prevention team regularly conducts spot checks on the implementation of respective epidemic prevention work on our farms to ensure that each epidemic prevention work is carried out properly;
- 加大防疫宣傳培訓力度，對技術骨幹定期開展防疫培訓，提升整體隊伍防疫技能水平。
We have stepped up the epidemic prevention publicity and training efforts and regularly provided epidemic prevention training to key technical staff, so as to enhance the epidemic prevention skills of the whole team.

<p>牧場牛隻 Cows on farms</p>	<ul style="list-style-type: none"> - 要求所有牧場結合所在地區情況，每年定期針對國家規定的人畜共患病、口蹄疫、牛流行熱等其他流行性疾病制定免疫計劃，並對其定期進行健康檢查； We require all farms to regularly develop the immunization programmes against other prevalent diseases such as zoonotic diseases, foot-and-mouth disease and bovine ephemeral fever as stipulated by the State according to the local situation each year, and conduct health examinations on them regularly; - 單獨設立病牛區，遠離新生犢牛，避免牛群交叉感染。同時，重症病牛治愈後須連續觀察一週無異常方可轉回健康牛群。 We've set up a separate area for sick cows to keep them away from newborn calves to avoid cross-infection. At the same time, we would closely monitor seriously ill cows for one week after treatment and return them to the healthy herd if they show no symptom of illness.
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2.3.2 淘牛管理制度 The Culled Cow Management System

現代牧業依據《中華人民共和國病死及死因不明動物處置辦法》《病死及病害動物無害化處理技術規範》等法律法規的相關規定，編製執行《淘牛中心制度編彙》《集團牛隻死淘管理制度》，對疾病牛、低產牛、大齡育成牛和死亡牛，建立完善的管理體系。

In accordance with the relevant requirements of laws and regulations such as the "Measures for Treatment of Dead Animals Died of Disease or for Unknown Reasons of the People's Republic of China" and the "Technical Specification for Harmless Treatment of Dead Animals Died of Disease and Sick Animals", Modern Dairy has compiled and implemented the "Culled Cow Center System" and the "Management System for Dead and Culled Cows of the Group" to establish a comprehensive management system for diseased cows, low-yield cows, older breeding cows and dead cows.

一方面，我們為需要淘汰的奶牛植入經國家認證免疫的低頻耳標，採集相關信息並上傳至奶牛疫病防疫電子信息管理系統，開具動物檢疫合格證明，保證離場牛隻免疫；另一方面，我們對病死牛或死因不明的牛隻堅決不買賣、不運輸、不加工、不食用，進行無害化處理。

On the one hand, we fix a low-frequency ear tag on each culled cow that the immunization of which has been certified by the State, collect relevant information and upload it to the electronic information management system for dairy disease prevention, issue animal quarantine certificates and ensure that cows transported out of a farm are immunized; on the other hand, in no circumstances do we have intention to sell, transport, process and eat dead cows died of disease or for unknown reasons. They would be given innocent treatment after death.

報告期內，本公司共銷售戰略淘汰牛隻102,616隻，均為檢疫合格後進行出售的戰略淘汰牛隻。
During the reporting period, the Company sold a total of 102,616 strategically culled cows, all of which were sold after passing a quarantine inspection.





03

優質產品 責任共贏

High Quality Product to Achieve
Win-Win Cooperation

3. 優質產品 責任共贏

High Quality Product to Achieve Win-Win Cooperation

3.1 高品質奶源

Quality Milk Source

現代牧業嚴格遵循《中華人民共和國食品安全法》《中華人民共和國產品質量法》《中華人民共和國畜牧法》等法律法規，制定嚴格的原奶質量標準，借助信息化手段加強原奶質量管控，確保為消費者提供優質產品。

Modern Dairy strictly abides by the "Food Safety Law of the PRC", the "Product Quality Law of the PRC", the "Animal Husbandry Law of the PRC" and other laws and regulations, formulated strict raw milk quality standards and strengthened raw milk quality control by means of informatization to ensure the provision of high-quality products to consumers.

3.1.1 原奶質量標準

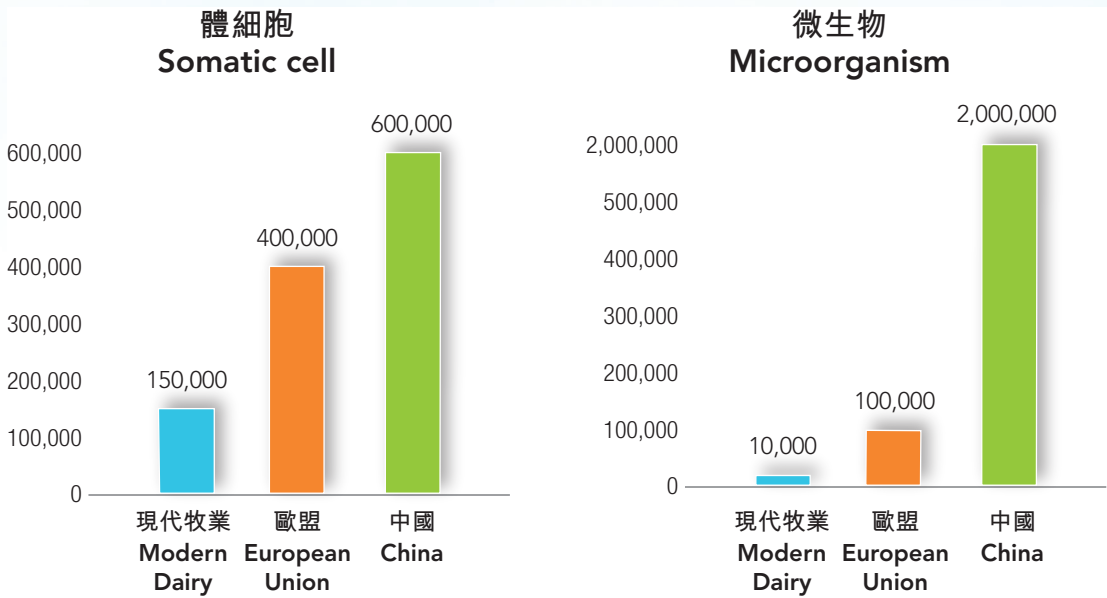
Quality Standards of Raw Milk

作為全國最大的原奶供應者，我們完全利用自產原奶生產自有品牌牛奶產品，依托先進的養殖生產管理體系和嚴苛的質量安全控制程序，嚴格監控從擠奶、製冷及運輸、生產過程的各個環節。我們始終堅持高起點、高定位、高標準，為消費者提供高品質、放心產品。2020年，現代牧業原奶毒素、獸殘、藥殘、污染物相關檢測項目全部合格，未造成原奶質量安全事故。

As the largest supplier of raw milk in China, we produce our own dairy products using our own raw milk, which relies on advanced breeding production management systems and strict quality and safety control procedures, strictly monitors all aspects from milking, refrigeration and transportation to production process. We adhere to the principle of a high starting point, high positioning and high standard to provide consumers with high quality and reliable products. In 2020, our raw milk passed all tests in respect of toxins, veterinary drug residue, drug residue and pollutants and no quality safety accident of raw milk occurred.

在質檢體系中，我們始終堅持質量控制「四不原則」，即不合格客戶不合作、不合格原料不入場、不合格原料不投餵、不合格原奶不出場，實現原奶品質的全流程控制。目前，原奶中體細胞指標在中國指導要求是60萬，在歐盟是40萬，現代牧業要求小於15萬，高於中國和歐盟標準。微生物方面，歐盟的標準是不能高於10萬，中國的微生物指標在三聚氰胺事件發生以後，要求不能高於200萬，現代牧業牛奶微生物總數1萬以下。

We keep insisting on the “Four-No Principles (四不原則)” of quality control in the quality inspection system, being no cooperation with unqualified customers, no entry of unqualified raw forage, no feeding of unqualified raw forage, and no delivery of unqualified raw milk, so as to achieve the whole process control of raw milk quality. Currently, the number of somatic cell in raw milk is 600 thousand according to Chinese guidelines, 400 thousand in the European Union, and less than 150 thousand in Modern Dairy. The standard of Modern Dairy is higher than those of China and European Union. With respect to microorganism, the standard of the European Union is no more than 100 thousand, and that of China is no more than 2 million after the Melamine Event, and that of Modern Dairy is less than 10 thousand.



3.1.2 原奶質量管控

Quality Control of Raw Milk

- 源頭控制

Control at the Source

現代牧業根據國務院辦公廳2018 43號文件要求，對奶牛養殖環節飼料、獸藥等投入品使用進行嚴格管控。原料到場後，我們會進行包括黃麴霉B1毒素在內的全面檢測，嚴於國家標準要求原料品質，堅決避免不合格的原料入場。同時，質檢人員負責每天對庫存原料進行感官、毒素抽檢，TMR飼料原料也會持續地進行指標監控，確保不合格原料不投餵，從源頭保障原奶質量。

Modern Dairy closely monitors and controls the feed and veterinary drugs used in cows breeding according to the requirements of State Council General Office 2018 Document No. 43. Upon the acceptance of raw forage, we will conduct comprehensive detection, including aflatoxin B1, and require the quality of raw forage more strictly than the national standard, absolutely preventing the acceptance of unqualified raw forage. At the same time, quality inspection personnel are responsible for conducting sensory and toxin inspections on stocked raw forage on a daily basis, and TMR feed raw forage are also subject to continuous indicators monitoring to ensure that no unqualified raw forage are fed, so as to guarantee the quality of raw milk from the source.

- 過程控制

Process Control

現代牧業嚴格執行《奶牛標準化規模養殖生產技術規範》，根據實際生產建立了以過程為導向的質量管理體系，在關鍵生產環節建立CCP點(Critical Control Point關鍵危害點)，結合過程性食品安全指標，全面加強對關鍵環節的監控。

Modern Dairy strictly implements the "Technical Specifications for Standardized Scale Dairy Breeding Production", and has established process-oriented quality management system based on actual production conditions, established Critical Control Point on key production stages, and set process food safety indicators to comprehensively strengthen the monitoring of key stages.

- 終端控制
Terminal Control

質量信息化平台實現了從原料到入庫、再到出庫飼餵、上廳擠奶到原奶出場的全鏈條「二維碼」質量信息追溯，保證每一滴原奶實現原料採購到原奶出場的全程追溯。

From raw feed acceptance to feeding cows, from milking to releasing raw milk, the quality information platform realized the traceability of the entire process of raw milk production with QR code, ensuring each drop of raw milk can be traced from feed purchase to releasing raw milk.

為保障原奶運輸質量安全，在原奶發車之前，各牧場會根據原奶銷售中心調度人員下發的發車數量、要求到廠時間安排裝車、發車，同時將每個客戶的具體發車信息以訂單的方式及時錄入易流GPS系統，再由原奶銷售中心實時關注牧場發車信息，及時調整出現的問題，做到原奶銷售過程可控。

For the purpose of guaranteeing the quality and safety of raw milk during transportation, before the raw milk is shipped, each farm will arrange the loading and shipment according to the shipment amount and required delivery time issued by the dispatcher of the raw milk sales center, and at the same time, the detailed shipment information of each customer will be entered into the Easy Logistics GPS (易流GPS) system in a timely manner in the form of orders, and then the raw milk sales center will follow the shipment information of the farm in real time and adjust the problems arose in a timely manner, so as to control the raw milk sales process.

在原奶裝卸的過程中，我們要求運奶車卸奶後在交奶工廠將各奶罐內壁清洗乾淨之後返回牧場，在裝奶前使用高成本的ATP塗抹檢驗設備對奶車進行塗抹檢測實驗，現場出具檢測結果合格後方可裝車，不合格則重新CIP清洗，確保打奶前奶車塗抹合格(ATP結果值 ≤ 300)。

In the process of raw milk loading and unloading, we require milk carriers to clean the inside of each milk tank after unloading milk at the delivery plant and then return to the farm. Before loading milk, we use high-cost ATP smearing inspection equipment to conduct smearing inspection experiments on the milk carriers, and only load the carriers after the inspection results issued on site are acceptable, otherwise the carriers will be cleaned again with CIP to ensure that the smearing of the milk carriers before milking meets the standard (ATP result value ≤ 300).





優質乳品關鍵指標領先進口乳品平均水平

Quality dairy products outperform the average level of imported dairy products in key indicators



現代牧業的優質乳品，在乳脂肪、乳蛋白、體細胞、菌落總數等牛奶關鍵指標上均領先進口牛奶平均標準，巴氏殺菌奶、UHT滅菌奶的糠氨酸均分別穩定低於12mg/100g蛋白質、140mg/100g蛋白質，品質居於世界前列，成為國內首家也是唯一一家巴氏滅菌奶和UHT滅菌奶同時通過國家「優質乳工程」驗收的企業。2020年，「尊貴裝純牛奶」、「金獎純牛奶」、「高鈣牛奶」三支產品均捧得Monde Selection（世界食品品質評鑒大會）金獎，其中「尊貴裝純牛奶」創下金獎七連冠記錄，「金獎純牛奶」榮獲兩連冠。

In terms of key milk indicators such as milk fat, milk protein, somatic cells and total colony count, Modern Dairy's quality dairy products are higher than the average level of imported dairy products, and the furosine content of pasteurised milk and UHT-sterilised milk is steadily lower than 12mg and 140mg in 100g protein, respectively, ranking among the highest in the world in terms of product quality. It has become the first and only enterprise in China to have both pasteurised milk and UHT-sterilised milk passed the national "Quality Milk Project" inspection and acceptance. In 2020, three kinds of products, namely "Premium Pure Milk", "Gold Pure Milk" and "High Calcium Milk", all won the Gold Prize of Monde Selection, with "Premium Pure Milk" winning the Gold Prize for seven consecutive years and "Gold Pure Milk" winning the Gold Prize for two consecutive years.



3.2 消費新提倡

New Consumption Proposition

現代牧業嚴格遵守《中華人民共和國消費者權益保護法》《中華人民共和國廣告法》等法律法規的要求，制定《產品投訴補貨管理辦法》等內部制度，保障消費者合法權益，對消費者保持最真誠的態度，向社會傳播最真實的信息。我們始終堅守以消費者為核心的經營理念，我們一方面根據消費者求調整、研發新的產品，提供更好的消費體驗，保持品牌的發展活力；另一方面充分尊重消費者對產品和品牌的發言權，樹立良好品牌形象。

Modern Dairy has strictly complied the “Consumer Rights Protection Law of the People’s Republic of China”, the “Advertising Law of the People’s Republic of China” and other laws and regulations, and formulated the “Management Measures for Replacement of Products Under Complaint” and other internal systems to protect the legitimate rights and interests of consumers. It always takes the most sincere attitude towards consumers and spreads the most truthful information to the society. We always adhere to the business philosophy of taking consumers as the core. On the one hand, we adjust and develop new products according to the needs of consumers, provide a better consumer experience, and maintain the vitality of our brands. On the other hand, we fully respect consumers’ voices on our products and brands to establish a good brand image.



調研用戶需求，供應定制化產品

Investigate user's needs and provide customized products



報告期內，為充分了解消費者實際需求，我們開展了七輪針對全國17個省、18個城市、不同年齡階段、不同收入階層近萬名消費者的調研，發現對於80後消費群體，注重品質要求，信任專業化牛奶企業的產品；對於90後消費群體，傾向高端又具有個性的產品；對於00後消費群體，願意選擇符合自身個性和自己偶像代言的產品。此次調研，使公司發現深入掌握消費者的行為習慣才能將產品研發落到實處，結合消費者傳播習慣、產品接觸習慣及口味需求，從而滿足不同消費者需求。

During the reporting period, in order to fully understand the actual needs of consumers, we conducted seven rounds of surveys on nearly 10,000 consumers at different ages and income groups in 18 cities of 17 provinces across the country, and found that for the post-80s consumer groups, they pay more attention to product quality and trust the products of specialized milk companies; for the post-90s consumer groups, they prefer high-end and individualized products; for the post-00s consumer groups, they are willing to choose the products that suit their own personality and are endorsed by their idols. This surveys enabled the Company to discover that we must thoroughly grasp consumers’ behavioural habits for product research and development, in combination with the dissemination habits, product contact habits and taste needs of consumers, so as to meet the needs of different consumers.



3.3 責任產業鏈

Responsible Industry Chain

現代牧業致力於營造共生、共發展的多元環境，構建原奶生產全鏈條佈局的同時積極扶持產業鏈上下游合作夥伴，以行業發展為先，致力於打造高品質可持續供應鏈，共享發展生態圈。

Modern Dairy is committed to creating a diversified environment of symbiosis and co-development. While constructing the whole chain arrangement of raw milk production, it actively supports upstream and downstream partners in the industry chain, takes industry development as the priority, and is committed to creating a high-quality sustainable supply chain and sharing the development ecosphere.

3.3.1 種養加一體化，零距離兩小時

Promote Integrated Development of Planting, Breeding and Processing at Zero Distance for Two Hours

在「純、真、鮮、活」的市場理念下，現代牧業憑藉規模化牧場建在配套草場裏、現代化工廠建在規模化牧場裏、各環節零距離無縫對接、生產過程零死角全面監管的特殊優勢，保證從擠奶到加工兩小時內完成，在源頭最大程度保證牛奶的新鮮和營養。

Under the market concept of “being pure, authentic, fresh and live”, Modern Dairy relies on the special advantages, e.g., each large-scale farms is built in a supporting grassland, modern factories are built in a large-scale farm, all production links are seamlessly connected at zero distance, and the production process is fully regulated with no loopholes, so as to ensure that the process from milking to processing is completed within two hours, and the freshness and nutrition of milk is guaranteed at source to the greatest extent.

在深耕上游的同時我們也積極開放下游產業，加強上下游協同。我們接受蒙牛、新希望乳業等首屈一指的區域型城市乳企參股，將募集資金充分用於下游客戶需求，靈活增群擴產，滿足國內消費者不斷增長的高端原奶需求，實現市場競爭力的又一次飛躍。

In addition to strengthening our upstream efforts, we also actively opened up our downstream sectors to enhance upstream and downstream synergies. We have accepted the equity participation of leading regional urban dairy companies such as Mengniu and New Hope Dairy, and used such proceeds to fully satisfy the needs of downstream customers, and flexibly expand the herd size and increase milk production to meet the growing demand from domestic consumers for high-end raw milk, thus achieving another leap in market competitiveness.



3.3.2 優化飼料結構，加強供應管控

Optimize Feed Composition and Strengthen Supply Control

現代牧業不斷完善《供應商管理制度》，遵循公開、公平、公正的採購原則，對供應商進行嚴格的選、用、育、留，實現對供應商準入、日常監督、供應商評價的全方面管理。

Modern Dairy continuously improves the "Supplier Management System", follows the procurement principles of open, fair and just procurement, conducts strict screening, hiring, cultivation and retention of suppliers, and realizes the management of supplier access, daily supervision and supplier evaluation in all aspects.

供應商準入
Supplier access

- 依據《供奶方投入品、服務中心、供奶方質量安全管理制
- 度》制定的各類物資評審標準，對新晉供應商進行準入評審，並引入對供應商社會責任履行情況的考量，評審遵循統一策劃原則，嚴格審核供應商資質；
Conduct the entry assessment of new suppliers according to the various materials evaluation standards formulated in the "Quality and Safety Management System of Supplies from Milk Suppliers, Service centers and Milk Suppliers". We also take into consideration the evaluation on suppliers' fulfillment of social responsibilities and follow the unified planning principles to strictly evaluate suppliers' qualifications;
- 每年度奶源質量技術管理中心對各責任部門準入流程執行有效性進行評審，並出具評審報告，雙重監管供貨質量。
The Milk Source Quality Technology Management center assesses the effectiveness of the entry process conducted by each responsible department and issues an assessment report each year to double-monitor the quality of supplies.

供應商監督
Supplier supervision

- 定期對供應商進行現場考察，尤其是針對特殊物料的定期抽查以及供應商在供應過程中有無超標排放廢水等危害環境的行為存在，完成供應商週期性的業務回顧；
Regularly conduct on-site inspection on suppliers, especially the regular spot checks on special materials and whether the suppliers overdischarge wastewater during the supply process and have other behaviors that cause environmental hazard, and complete the periodic business review of suppliers;
- 實行供應商應商分級管理，並通過定期質檢及溝通，形成《供應商綜合評價表》，最終以供應商評價為依據，淘汰產品質量多次不合格、出現違法違紀現象的供應商，與優質供應商建立長期合作關係。
Adopt the supplier hierarchical management and prepare the "Comprehensive Supplier Evaluation Form" through regular quality checks and communications. Based on the evaluation results of suppliers, they will be eliminated if the quality of their products fails to meet the relevant standards for several times, or there is an indication that they breach the relevant laws and regulations, and we will establish a long-term partnership with quality suppliers.

供應商評價
Supplier evaluation

- 對供應商開展年度評價工作，對考核不合格的供應商，要求在指定時間內進行整改，整改覆核仍不達標的供應商，立即終止合作。
Conduct the annual evaluation of suppliers, requiring the unqualified suppliers to make rectification within a specified time. For suppliers that still failed to meet the relevant standards after rectification and review, we will terminate cooperation with them immediately.





安環中心青貯供應商管理

Management of Silage Suppliers in security and environment center

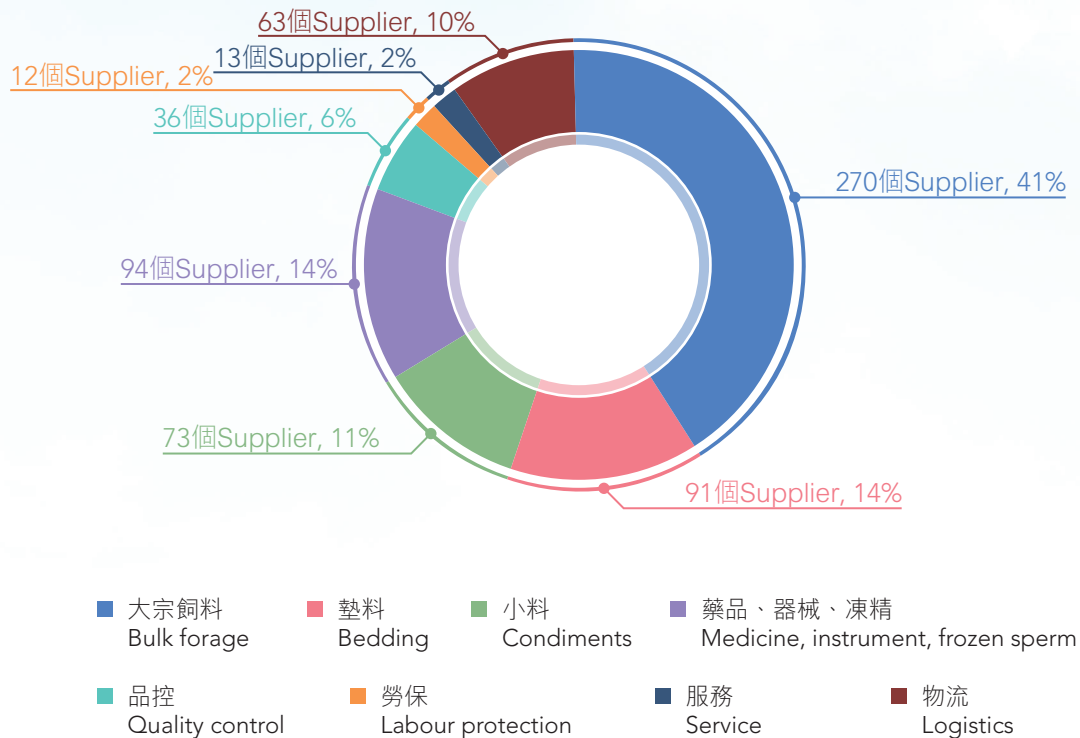


為確保青貯玉米產品與服務質量，與供應商建立長期互惠供求關係，安環中心制定了《青貯供應商評價制度》，以供應商評價細則及標準進行考評定級，通過評定等級進行考評結果處理。此外，安環中心在2020年採用競談方式購買青貯，明確競爭性談判文件各崗位職責、明確供應商準入、準出流程、明確競談中競談標準設立，全面完善青貯供應商管理。

In order to ensure the quality of silage corn products and related services and establish the long-term reciprocal supply and demand relationship with suppliers, the security and environment center has formulated the "Silage Supplier Evaluation System" to evaluate and grade the suppliers according to the evaluation rules and standards of suppliers, and handle the evaluation results based on the grading. In addition, the security and environment center will adopt the competitive negotiation method to purchase silage in 2020, clarifying the responsibilities of each position, the entry and exit process of suppliers, and the establishment of competitive negotiation standards in the competitive negotiation, so as to comprehensively improve the management of silage suppliers.

指標 Indicator	單位 Unit	2020年 2020
合作供應商總數 Total number of cooperative suppliers	個 Supplier	567
國外 Overseas	個 Supplier	23
國內 Domestic	個 Supplier	544

按類別劃分供應商數量及百分比
Number and percentage of suppliers by category



3.3.3 深化行業交流，依法合規經營

Deepen Industry Exchanges and Operate in Accordance with the Law

現代牧業將供應商納入廉潔反腐管理範疇，將可持續發展理念融入供應鏈管理，降低產業鏈上社會與環保風險。我們要求所有合作的供應商簽署《反商業賄賂合同》，對供應商行為規範開展定期檢查，並在2020年開始對牧場新增的供應商採取問卷調研，鼓勵供應商提出影響正常合作的吃拿卡要和腐敗問題。此外，我們積極開展供應鏈反腐倡廉溝通，深化行業廉潔建設交流，與供應商共同成長發展。

Modern Dairy includes its suppliers into the scope of integrity and anti-corruption management, incorporates the concept of sustainable development into supply chain management, and mitigates social and environmental risks along the industrial chain. We require all the suppliers cooperated with us to sign an Anti-Commercial Bribery Contract, and conduct regular inspections on supplier behaviors. We started to conduct a questionnaire survey on new suppliers of farms in 2020, encourage suppliers to raise such issues as taking, accepting and seeking rebates and other corruptions that undermine normal cooperation. In addition, we actively carry out anti-corruption and integrity communications with suppliers in the supply chain, and deepen the exchange of ideas on integrity building in the industry, so as to grow and develop together with suppliers.



供應商廉政共建活動
The Supplier Integrity Building Activity



现代牧业蚌埠牧场
MODERN FARMING BENGBU FARM

社会责任
食品安全对消费者负责
防疫安全对产业负责
环境安全对子孙后代负责

企业定位
高标准 高定位 高起点
用高标准造就今天的乳业
做产业一体化全球领导者

04

美好生活 共同创造

Create a Better Life Together

4. 美好生活 共同創造

Create a Better Life Together

4.1 高標準的「養牛人」

High-standard “Cow Keeper”

現代牧業秉承以人為本的理念，積極保障員工權益，關愛員工身心健康，努力打造安全、安心、舒適的工作環境，全方位守護員工。

Modern Dairy adheres to the people-oriented philosophy, actively protects employees' rights and interests, cares about their physical and mental health, and strives to create a safe, secure and comfortable working environment, so as to protect employees in all aspects.

4.1.1 多元團隊

Diversified Team

本公司嚴格遵守《中華人民共和國勞動法》《中華人民共和國勞動合同法》《中華人民共和國未成年人保護法》《禁止使用童工規定》等國家法律法規的要求，積極維護員工在平等僱傭、薪酬福利、工時假期等多方面的權益，推動建立人才與企業相互促進的多元化團隊。

The Company strictly follows the requirements of national laws and regulations such as the “labour Law of the People’s Republic of China”, the “labour Contract Law of the People’s Republic of China”, the “Law of the People’s Republic of China on Protection of Minors” and the “Regulations on Prohibition of Child labour”, actively protects the rights and interests of employees in various aspects such as equal employment, remuneration and benefits, working hours and holidays, and promotes the building of a diversified team in which talents and enterprises can promote each other.

- 平等僱傭

Equal employment

我們制定了《人力資源制度彙編》《員工行為準則》《基礎員工管理手冊》《離職操作手冊》等制度，完善內部管理。報告期內，我們積極通過校園招聘、社會招聘等方式招納人才。公司與國內多所專業類院校達成校企合作，完成了一線技術型員工的招聘工作。同時在多所高校召開校園招聘會和雙選會，完成各職能部門管培生的招聘。

The Company formulated various systems including the “Human Resources System Compilation”, the “Codes of Conduct for Employees”, the “Basic Employee Management Manual” and the “Resignation Manual” to improve internal management, During the reporting period, we actively recruited talents through campus recruitments and social recruitments. The Company has entered into university-enterprise cooperation with a number of professional institutions in China and completed the recruitment of frontline technical staff. At the same time, we held campus job fairs and Bi-election of Campus at various universities and completed the recruitment of management trainees for various functional departments.





「天生牛人，耀強牧業」主題校園招聘活動

Campus recruitment activity with the theme of "Pastoralist Born for Pastoral Development"



現代牧業2021年校園招聘活動於2020年10月14日正式啓動，遍及中國20座城市的25所高校召開「校園雙選會」和「校園招聘會」，通過人力資源部門主管和優秀校友宣講等形式，設置筆試、初試、測評、複試四個環節，完成包括飼養、擠奶、畜牧等職能部門管培生的招聘。此次的招聘活動吸引了1,200位優秀學子的駐足，最終有71位「牛人」加入我們，其中涉及學校25所，專業8大類，本科生63人，碩士8人。

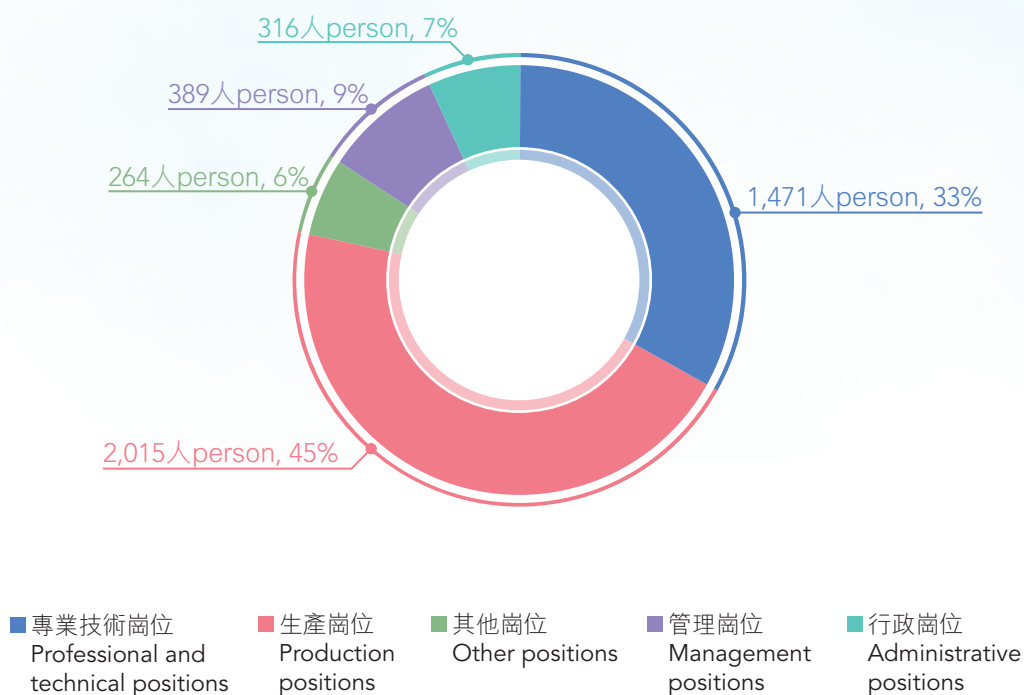
Modern Dairy's 2021 campus recruitment activity was officially launched on 14 October 2020, with the "Campus Job Fair" and the "Bi-election of Campus" held at 25 universities in 20 cities across China, at which the supervisor of the human resources department and outstanding alumni made presentations, and the four sessions of written test, preliminary test, evaluation and re-test were conducted. Consequently, we have completed the recruitment of management trainees in various functions including breeding, milking and animal husbandry. The recruitment activity attracted 1,200 outstanding students, and 71 "outstanding talents" have finally joined us, including 63 undergraduates and 8 masters from 25 universities in 8 major categories.



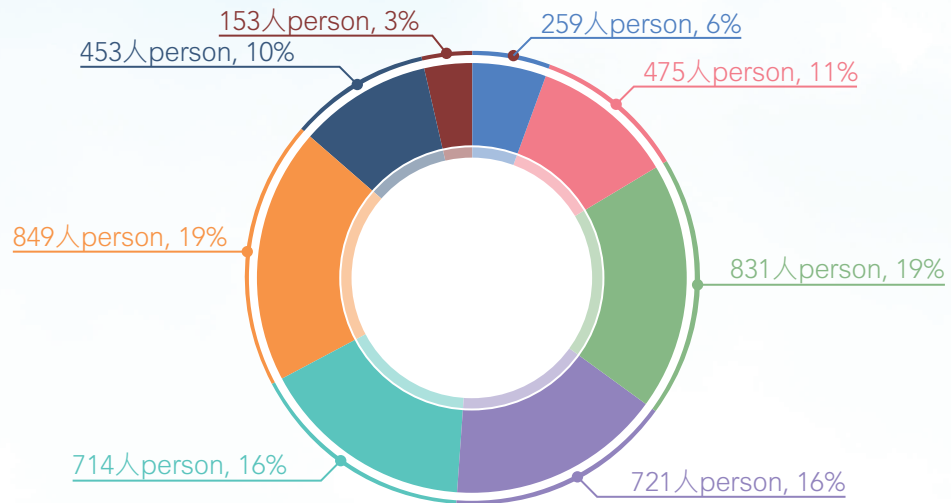
我們在招聘過程中，始終堅持公開招聘、公平競爭、全面考核、擇優錄用，嚴格避免基於性別、年齡、國籍、民族和宗教信仰等因素的歧視行為，致力於打造平等團結、和諧多元的人才隊伍。2020年，本公司共有員工4,455人，其中本地用工率達66.7%。

In the recruitment process, we insisted on open recruitment, fair competition, comprehensive assessment and selection of best candidates, strictly avoided discriminatory behaviors based on gender, age, nationality, ethnicity and religious beliefs, etc. We are committed to building an equal, united, harmonious and diversified talent team. In 2020, we had 4,455 employees, of which the local employment rate reached 66.7%.

按僱用類型劃分的員工人數及比例
Number and percentage of staff by employment type

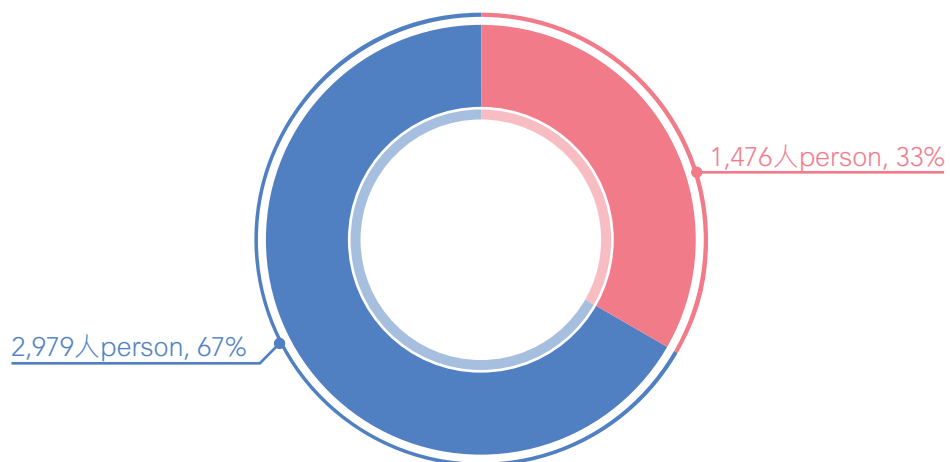


按年齡組別劃分的員工數量及比例
Number and percentage of staff by age group



- | | | | |
|------------------------------------|-----------------------------|-----------------------------|-----------------------------------|
| ■ 24歲及以下
24 years old and below | ■ 25-29歲
25-29 years old | ■ 30-34歲
30-34 years old | ■ 35-39歲
35-39 years old |
| ■ 40-44歲
40-44 years old | ■ 45-49歲
45-49 years old | ■ 50-54歲
50-54 years old | ■ 55歲以上
55 years old and above |

按性別劃分的員工數量及比例
Number and percentage of staff by gender



- | | |
|----------------|--------------|
| ■ 女性
Female | ■ 男性
Male |
|----------------|--------------|



- **權益保障**

Protection of rights and interests

在薪酬福利方面，公司依照國家及地方人社局規定為員工辦理五險一金，保障員工基本權益，並制定合規合理的薪酬增長幅度，激發員工工作積極性，2020年，人均工資保持增長。在假期管理方面，公司嚴格落實執行國家法定節假日休假安排，保障員工休假權益。

In terms of remuneration and benefits, the Company makes contributions to “Five Social Insurances and One Housing Fund (五險一金)” for employees in accordance with the regulations of National and Local Human Resources and Social Security Bureaus, protect the basic rights and interests of employees, set a reasonable rate of salary increase to motivate employees. In 2020, we maintained a growth in per capita wages. In terms of leave management, the Company strictly implements the leave arrangement for national holidays to protect the rights and interests of employees.

- **杜絕童工及強制勞工**

No child labour and forced labour

我們堅決杜絕童工及強制勞工行為。本公司依法合規審理員工入職資質，從源頭杜絕僱傭童工，並禁止任何形式的強制勞動，若發現違規情況，將會積極採取處理行動，保障公司人才體系平穩運行。報告期內，本公司未發生使用童工及強制勞工等違規情況。

We are determined to prevent child labour and forced labour. The Company reviews the entry qualification of employees in accordance with the law to eliminate the employment of child labour at source, prohibits any form of forced labour, and would actively take action to correct any violations found to ensure stable operation of the talent system of the Company. During the reporting period, the Company did not have any violations of child labour or forced labour.

4.1.2 安全保障

Security Assurance

公司嚴格遵守《中華人民共和國安全生產法》《中華人民共和國職業病防治法》《生產安全事故報告和調查處理條例》《中華人民共和國國家職業衛生標準》等國家法律法規，並制定《安全生產管理制度彙編》，包括《安全生產事故管理制度》《安全生產應急管理制度》等制度，落實安全生產運營。

The Company has strictly complied with the national laws and regulations such as the "Production Safety Law of the People's Republic of China", the "Occupational Disease Prevention Law of the People's Republic of China", the "Regulations on Reporting, Investigation and Handling of Production Safety Accidents" and the "National Occupational Health Standards of the People's Republic of China", and has formulated the "Production Safety Management System Compilation", including the "Production Safety Accidents Management System", the "Production Safety Emergency Management System" and other systems, to ensure safe production and operation.

<p>奮鬥目標 確保「三個實現」</p> <p>Goals Ensure the "realisation of three goals"</p>	<p>考核機制 健全落實考核 機制</p> <p>Appraisal Mechanism Improve and implement the evaluation mechanism</p>	<p>安全教育 強化安全教育 培訓</p> <p>Safety Education Strengthen safety education and training</p>	<p>相關方管控 完善相關方管控</p> <p>Related Party Control Improve the control of related parties</p>	<p>全方位監督 實現標杆化管理</p> <p>Overall Supervision Achieve benchmarking management</p>
<ul style="list-style-type: none">✓ 全年無上級考核事故✓ 全年無安全生產事故✓ 連續無事故天數新高✓ No accidents assessed by a higher authority in the year✓ No production safety incidents throughout the year✓ A new record in the number of accident-free days in a row	<ul style="list-style-type: none">✓ 「四不放過」原則✓ 誰管理，誰安排✓ 誰實施，誰負責✓ The "four no-compromises" principle✓ Whoever manages, whoever arranges✓ Who implements and who take responsibility	<ul style="list-style-type: none">✓ 安全生產公開課✓ 「一把手」講安全✓ 安全管理諮詢分享✓ Public class on production safety✓ Leaders are in charge of safety✓ Consultation and sharing of safety management	<ul style="list-style-type: none">✓ 相關方准入✓ 安全協議及技術交流✓ 過程監督與驗收✓ The entry requirements for related parties✓ Safety agreements and technical exchanges✓ Process monitoring and acceptance	<ul style="list-style-type: none">✓ 簽訂零事故責任狀✓ 執行雙重預防機制✓ 推進安全標準化✓ Sign a zero-accident responsibility letter✓ Implement dual prevention mechanism✓ Promote safety standardisation



報告期內，公司在安全管理體系、生產安全、職業健康、防疫安全等方面開展多項舉措，充分確保生產及人員安全。2020年度，本公司未發生重傷及以上生產安全事故，未發生火災事故、設備運行事故、職業衛生及防疫事故及勞資糾紛事件。

During the reporting period, the Company carried out a number of measures in the areas of safety management system, production safety, occupational health and epidemic prevention to fully ensure the safety of production and personnel. In 2020, the Company recorded no production safety-related accidents resulting in serious injury or worse, fire accidents, equipment operation accidents, occupational health and epidemic prevention accidents and labour disputes.



安全管理體系 Safety Management System

- 完善安全管理體系建設，已有14家法人單位取得ISO14001環境管理體系和ISO45001職業健康安全管理体系審核認證並安全管理體系持續推進運行。
- Improve the safety management system, with 14 legal entities having been accredited and obtained the ISO14001 environmental management system and the ISO45001 occupational health and safety management system, and the implementation of the safety management system being promoted continuously.



生產安全 Production Safety

- 持續推進安全生產標準化建設，建立安全生產責任制，規範安全生產；
- 組織排查治理隱患，加強監控防範重大危險源，如重點區動火須指定現場監火人，配備消防滅火器材，作業後留人觀察消除火種；根據粉塵防爆各項管理要求，制定現場安全檢查表等。同時，制定應急預防措施，應對突發狀況；
- 為員工發放勞動防護用品、購買意外傷害保險，並在現場配備規範施工標識牌；
- 增加招投標中對供應商安全管理水準的考量，引進安全施工管理水準優質的供應商，從源頭保障生產安全。
- Continuously promote the standardization of production safety, establish the production safety responsibility system and regulate production safety;
- Organize the detection and elimination of potential hazards and strengthen the monitoring and prevention of major hazards, such as designating an on-site supervisor to monitor fire in a critical area, putting in place fire-fighting equipment and leaving someone to observe the elimination of fire after operation; and formulate on-site safety checklists in accordance with various management requirements for dust and explosion prevention. At the same time, formulate emergency precautions to deal with unexpected situations;
- To provide employees with labour protection equipment, purchase accidental injury insurance and put in place standard construction signages at the sites;
- Take into consideration suppliers' safety management standards in the tender and bidding process, and engage the suppliers satisfying the quality safety management standards to ensure production safety at source.



職業健康 Occupational Health

- 制定《員工體檢制度》等內部管理制度，定期組織員工體檢，對於職業病早發現、嚴防範。報告期內，職業病體檢覆蓋率為100%，補充醫療保險覆蓋率達100%，補充商業保險覆蓋率為100%；
- 集團、牧場每月定期組織全員生產安全培訓、職業健康培訓，進行考試考核，並不定期進行電話或現場抽查培訓執行情況；
- 在新冠疫情期間，向員工發放防疫物品、防疫手冊和普及防疫知識等，保障員工的職業健康與人身安全。
- Formulate internal management systems such as the "Employee Medical Examination System", and organize employees to conduct regular medical examinations for early detection and prevention of occupational diseases. During the reporting period, the coverage rate of occupational disease medical examination was 100%, the coverage rate of supplementary medical insurance was 100% and the coverage rate of supplementary commercial insurance was 100%;
- The Group and its farms organize regular production safety training and occupational health training for all staff on a monthly basis, arrange examinations and tests, and conduct random checks on the implementation of training by telephone or on site from time to time;
- During the COVID-19 pandemic, staff are provided with epidemic prevention items, as well as the manuals and knowledge on epidemic prevention to protect their occupational health and personal safety.



安全 Safety

- 建立完備防疫制度體系，如牧場出入管理制度、生產區防疫管理制度、人員防護管理制度以及牛群防疫管理制度等；
- 建立健全防疫組織架構，建立牧場防疫小組，明確職責分工，確保各項防疫工作落地；
- 定期開展防疫培訓，鼓勵技術骨幹深造學習，提升整體隊伍防疫技能水平。
- Establish a comprehensive epidemic prevention system, such as a farm access management system, the epidemic prevention management system for production areas, the personnel protection management system and the epidemic prevention management system for cattle.
- Establish and improve the organizational structure for epidemic prevention and establish the epidemic prevention team for farms with clear division of responsibilities to ensure that all epidemic prevention tasks are carried out properly;
- Conduct regular epidemic prevention training and encourage technical backbones to pursue further studies, so as to improve the epidemic prevention skills of the whole team.

4.2 謀進取的「養牛人」 Ambitious “Cow Keeper”

優秀的員工是公司發展的後備軍。我們高度重視人才培養，持續優化人才培養體系，增強公司核心競爭力。同時，我們關愛員工工作與生活，注重員工交流溝通，開展豐富多彩的員工活動，推動建立積極向上、團結和諧的工作發展環境。

Excellent employees are the reserve force for the Company's development. We attach great importance to talent training, continuously optimize the talent training system, and enhance the core competitiveness of the Company. At the same time, we care about the work and life of employees, pay attention to communication with employees, carry out various employee activities, and promote the establishment of a positive, united and harmonious career development environment.

4.2.1 成長發展 Growth and Development

- 培訓管理
Training management

為加強員工職業技能，支撐集團戰略和業務發展，公司建立「現代牧業集團牛人學院」，為員工提供豐富的學習資源，助力員工提升專業及管理水平，全方位推動員工成長發展。

In order to strengthen employees' vocational skills and support the Group's strategy and business development, the Company has established “Modern Dairy Niuren Academy (現代牧業集團牛人學院)” to provide employees with abundant learning resources, help them improve their expertise and management capability, and promote their growth and development in all aspects.

牛人學院根據集團高管、中層領導、基層管理幹部、大學生等不同員工類型，開設了頭牛、金牛、青年牛、犢牛培訓班，有針對性的加強員工職業素養：

According to the different types of employees, such as senior executives, middle-level leaders, grassroots management cadres and university students of the Group, the Niuren Academy has set up the training classes of leaders (頭牛), outstanding talents (金牛), young talents (青年牛) and novices (犢牛) to enhance the professionalism of employees in a targeted manner:

- 針對新入職員工，我們重塑了新員工90天導航學習地圖，優化新員工培訓內容，明確培訓流程，實現新人入職標準化。

For new hires, we reshaped the 90-day navigation learning map for new hires, optimized the training content for new hires and clarified the training process, thus realizing the standardization of training for new hires.

- 針對牧場運營人員，我們邀請丹麥農業諮詢中心著名精益專家Vibeke Fladkjaer Nielsen就《牧場精益化管理》開展培訓，推動牧場精益化管理，改善牧場管理結果。

For farm operation staff, we invited Vibeke Fladkjaer Nielsen, a famous lean expert from the Danish Agricultural Consulting center, to conduct training on “Farm Lean Management”, so as to promote farm lean management and improve farm management results.



- 針對集團中高層以上員工，我們依托「值得」APP開設「中歐•蒙牛•現代牧業Mini-MBA班」，提升管理人員格局，搭建全面系統的管理知識結構，發展全方位的管理能力。此外，我們還聯合勃林格和蒙牛，讓中高層以上的員工參加外訓課程，有針對性實現項目管理提升。

For the middle and senior staff of the Group, we have established the “China-Europe, Mengniu and Modern Dairy Mini-MBA Class (中歐•蒙牛•現代牧業Mini-MBA班)” based on the “Zhide (值得)” APP, to enhance the pattern of management personnel, build a comprehensive and systematic management knowledge structure, and develop management ability in all respects. In addition, we have joined hands with Boehringer (勃林格) and Mengniu to provide external training courses for middle and senior employees, and improve project management in a targeted manner.



報告期內，牛人學院還基於《2020年集團「精淬計劃」執行辦法》，開設了管培生犢牛班、儲備部長班和儲備主任班，深化對儲備幹部人才的培養，充實團隊後備力量。同時，為促進公司員工的學習和學歷教育，學院對獲取在職大專及以上成人學歷的員工給予在職學歷教育補貼，鼓勵員工提升自我。

During the reporting period, in accordance with the “Implementation Measures for the Group’s ‘Elite Cultivation Plan’ for 2020 (《2020年集團“精淬計劃”執行辦法》)”, the Niuren Academy also offered a management trainee class, reserve cadre class and reserve director class to deepen the cultivation of reserve cadres and strengthen the reserve talents of the team. At the same time, in order to promote the learning and academic education of the Company’s employees, the Niuren Academy provided the subsidies for on-the-job academic education to employees who have obtained the adult academic qualification at the college level or above to encourage them to improve themselves.

此外，公司於2020年7月1日正式上線了「知鳥」在線學習平台，作為員工日常學習、交流、分享以及培訓管理的統一入口，借助平台，公司可以快速積累和開發內部課程，形成內部知識課件庫。

In addition, the Company officially launched the “Zhiniao (知鳥)” online learning platform on 1 July 2020, which serves as a unified portal for employees’ daily learning, communication, sharing and training management. Relying on the platform, the Company can quickly accumulate and develop internal courses and form an internal knowledge courseware library.

指標 Index	單位 Unit	2020年 2020
培訓人次 Number of trainees	人次 Person-time	139,820
培訓時長 Training time	小時 Hour	102,393.72
其中：專業培訓 Of which: professional training	小時 Hour	54851.59
管理培訓 Management training	小時 Hour	9771.56
其他培訓 Other training	小時 Hour	37770.57
員工平均受訓時數 Average training hours of employees	小時／人 Hour/person	22.81
女性員工人均受訓時數 Average training hours of female employees	小時／人 Hour/person	21.50
男性員工人均受訓時數 Average training hours of male employees	小時／人 Hour/person	23.70
培訓經費支出金額 Amount of training expenses	萬元 RMB0'000	52



- 晉升管理
Promotion management

<p>晉升機制 Promotion mechanism</p>	<ul style="list-style-type: none"> - 設置管理、技術、職能、生產四個系列，規範六層職級晉升，持續改進員工激勵和晉升機制。 Establish the four series of management, technology, function and production, standardize the six-level promotion, and continuously improve the employee incentive and promotion mechanism.
<p>人員流失管理 Staff turnover management</p>	<ul style="list-style-type: none"> - 實施人員流失績效考核，結合每月實際人員流動情況對相關的部門負責人進行考核； The Company implements a staff turnover performance evaluation plan, and evaluates the relevant department heads with reference to the actual monthly staff turnover; - 要求各牧場對基層離職人員進行訪談，了解員工離職原因，並針對發現的問題提出改善方案。報告期內，員工流失率為2.68%。 All farms are required to interview the resigned grassroots to find out the reasons for resignation, and propose improvement plans to address the problems identified. During the reporting period, the employee turnover rate was 2.68%.
<p>關鍵人才儲備 Key talent pool</p>	<ul style="list-style-type: none"> - 建立關鍵崗位人才儲備庫，組織各單位有序開展人才儲備工作，根據部門人員、崗位特性，設立崗位年齡、專業、工作經驗等任職資格要求； The Company has established a talent reserve pool for key positions, organized each unit to carry out talent reserve work in an ordinary manner, and established such job qualifications as age, profession, and work experience according to the characteristics of department members and positions; - 建立關鍵崗位人才關懷機制，通過月度或季度的溝通會及時了解、解決員工生活和工作上的困難，充分傳達企業發展信息，鼓勵團隊精誠團結。 Establish the caring mechanism for talents in key positions. We will timely understand and solve the difficulty of employees in life and work through monthly or quarterly communication, fully convey corporate development information and encourage teamwork.



4.2.2 人文關懷

Humanistic Care

我們致力於為員工創造和諧輕鬆的工作氛圍，與員工平等溝通，探索現代牧業特色的「家」文化建設。報告期內，我們通過民主管理建設以及多元化的員工關愛活動，豐富員工生活，增強員工對公司的歸屬感和認同感。

We are committed to creating a harmonious and relaxed working atmosphere for employees, communicating with employees on an equal basis, and exploring the construction of the “home” culture with the characteristics of Modern Dairy. During the reporting period, we enriched the life of employees and enhanced their sense of belonging and recognition with the Company through democratic management construction and diversified employee care activities.

- 民主管理

Democratic management

現代牧業充分保障員工的人權、言論自由，依據《工會工作條例》完善民主管理建設。圍繞公司經營中的重大事項、重大決策、幹部任免、涉及職工切身利益的問題及黨風廉政建設密切相關的問題進行信息公開，使廠務公開工作落到實處。同時，通過民主生活會、群眾座談會、問卷調研廣泛徵集員工意見，提出解決措施和改進辦法，有力地促進了公司的規範化管理和長足發展，增強了職工的主人翁意識。集團制訂各項與員工切身利益相關的制度時都能廣泛徵求全體職工的意見，對一些合理化的建議，也能夠及時採納、吸收。

Modern Dairy fully protects the human rights and freedom of speech of employees, and improves the construction of democratic management in accordance with the “Regulations on the Work of Trade Union”. We make information disclosure on major issues, major decisions, the appointment and removal of cadres, the issues related to employees’ interests and the issues closely related to the construction of party integrity in the Company’s operation, so that the factory affairs are disclosed properly. At the same time, through democratic life meetings, public seminars and questionnaire surveys, we collect opinions from employees and propose solutions and improvement methods, which have strongly promoted the standardized management and long-term development of the Company and enhanced the sense of ownership of employees. When the Group formulates various systems related to the personal interests of employees, the views of all employees are extensively solicited, and some reasonable suggestions are adopted and absorbed in a timely manner.



- 員工關愛
Employee care

我們注重豐富員工精神生活，促進員工生活與工作的平衡。一方面公司組織舉辦了趣味文化活動，為員工提供展示個人風採的平台；另一方面，公司在傳統節日為員工提供節日禮品和祝福，使員工充分感受公司關懷。

We pay attention to enriching the spiritual life of employees and promoting the balance between life and work. On the one hand, the Company organizes interesting cultural activities to provide a platform for employees to show their personal talent and skills. On the other hand, the Company offers holiday gifts and blessings to employees on traditional festivals to make them fully feel the Company's care.



牧光下的戰「疫」攝影大賽 The "Fighting Pandemic" photo competition on a farm



2020年，公司在保障員工身體健康安全的基础上舉辦了「牧光下的戰「疫」攝影大賽，豐富員工業餘生活，以不同視角展現牧場戰「疫」，向員工傳遞希望，鼓勵大家眾志成城、砥礪前行。

In 2020, on the basis of protecting the health and safety of employees, the Company held the "Fighting Pandemic" photo competition on a farm to enrich the life of employees after work, and show the fight against the pandemic on a farm from different perspectives, spread hope to employees, and encourage them to work together and take firm steps to move forward.



「勇戰疫情巾幗擔當」女王節系列活動 The Women's Day activity in the Theme of "Female Employees Fighting Pandemic"



為表彰在疫情期間守崗位、抗疫情、勇擔當、做表率的女員工，致敬為打贏疫情防控戰貢獻力量的牧場巾幗，現代牧業開展了「三八紅旗手」表彰活動，將抗擊疫情做出卓越貢獻的員工事跡譜寫成詩，弘揚奉獻精神，鼓勵更多員工積極投入。

In order to commend the female employees who held their posts, fought the pandemic, took responsibility and set an example during the pandemic, and pay tribute to the female employees who contributed to epidemic prevention and control on farms, Modern Dairy carried out the "8 March Red Banner" recognition activity, writing a poem about the employees who made outstanding contributions to the fight against the pandemic, promoting the spirit of dedication and encouraging more employees to participate in it actively.

4.3 重執行的「養牛人」 Pragmatic “Cow Keeper”

4.3.1 精準扶貧，促進就業 Accurate Poverty Alleviation and Employment Promotion

公司積極響應國家「一控兩減三基本」的政策，助力貧困地區發展，改善貧困地區人民生活質量，將企業發展與社會責任緊密相連，積極回饋社會，為建設和諧社會貢獻力量：

The Company actively responds to the national policy of “one control, two reductions and three basics”, helps with the development of impoverished areas, improves the quality of life of people in impoverished areas, closely links corporate development with social responsibilities, actively rewards to the society, and contributes its part to the building of a harmonious society:

- 牧場選址多為鄉村貧困地區，積極吸收當地人民為員工，拓寬當地人民就業渠道。2020年，現代牧業在全國範圍內已建成萬頭規模牧場26個，有效增加了多地社區的就業機會。
The farms are mostly located in poor rural areas, where we actively absorbed local farmers as employees and broadened the employment pipeline for them. In 2020, Modern Dairy built 26 large-scale 10,000-cattle farms nationwide, effectively increasing employment opportunities for communities in many areas.
- 依托「企業+基地+農戶」的飼草產業化經營模式，輻射帶動牧場週邊農戶從事飼草種植，幫助農戶提高收入水平。
Relying on the “enterprise + base + farmers” forage industrialization management model, the Company drives farmers around its farms to engage in forage planting, thereby helping them to raise their income level.
- 牧場優先為當地貧困群體開放部分崗位，積極幫助貧困群眾解決就業困難。
Each farm of the Company gives its priority to offering some vacancies to local poor groups and actively helps poor people to solve their employment difficulty.
- 積極參與貧困地區物資捐獻公益活動。在「中國小康牛奶行動」大型公益活動中，為115餘所貧困地區學校的學生累計捐贈了64,107提、近80萬包牛奶物資，捐贈價值達385萬元。
We actively participated in the public welfare activities of donating materials to poverty-stricken areas. In the large-scale public welfare activity themed “China Well-off Milk Action (中國小康牛奶行動)”, we donated 64,107 boxes or nearly 800,000 packs of milk to students in more than 115 schools in impoverished areas, with a donation value of RMB3.85 million.



4.3.2 攜手抗疫，馳援一線

Jointly Fight Against the Pandemic by Supporting the Frontline Pandemic Personnel

2020年1月，新型冠狀病毒肺炎席捲全國。國家衛生健康委發佈的《新型冠狀病毒感染的肺炎防治營養膳食指導》表明在新冠病毒肺炎防控的關鍵時期，科學合理的營養膳食、每天食用奶及奶製品，能有效增強機體抵抗力，有助於新冠肺炎的防控與救治。

In January 2020, the COVID-19 pneumonia swept through the whole country. The “Nutritional Dietary Guidance for Prevention and Treatment of Pneumonia Caused by COVID-19 Infection” issued by the National Health Commission indicates that, during the critical period of prevention and control of the COVID-19 pneumonia, the scientific and reasonable nutritional diet and daily consumption of milk and dairy products can effectively strengthen the body’s antiviral ability and help with the prevention and treatment of the COVID-19 pneumonia.

作為國內最大的原奶生產商，現代牧業積極響應國家號召加入捐贈行列，累計捐贈價值1,000萬元現代牧業品牌系列奶類產品，全力支持醫院、疾控中心、治安崗亭、監測站、車站等防疫現場提供優質牧場奶。現代牧業用自己的實際行動展現了企業的社會大愛與責任，弘揚了中華民族的傳統美德。

As the largest raw milk producer in China, Modern Dairy has actively responded to the national call and immediately made donations. We cumulatively donated RMB10 million worth of milk products under Modern Dairy brand and fully supported hospitals, disease control centers, security posts, monitoring stations, stations and other epidemic prevention sites with quality farm milk. With its practical actions, Modern Dairy demonstrated its love and responsibility for the society and promoted the traditional virtues of the Chinese nation.



4.3.3 助力搶收，聯合應對

Joint Efforts to Harvest Crops Timely

2020年，長江流域入汛以來持續降雨，馬鞍山丹陽鎮當地房屋農田受災嚴重，全市上下進入緊張防汛救災狀態。現代牧業馬鞍山牧場積極響應當地政府的防汛安排，組成「防汛行動小組」馳援災情一線，為防汛「戰士」送上足量品牌純牛奶和相關物資，盡可能滿足前線需求，為長江防汛抗險「防火牆」添磚加瓦，發揮我們企業的社會責任。

In 2020, due to continuous rainfalls in the Yangtze River basin since the beginning of the flood season, the local houses and farmlands in Danyang Town, Maanshan City were seriously damaged, and the whole city stepped into a state of intense flood control and disaster relief. In active response to local government's flood control arrangement, the Maanshan Farm of Modern Dairy formed a "Flood Control Action Team" to support the frontline personnel of the disaster, sent a sufficient amount of branded pure milk and related supplies to the flood control "warriors" to meet the needs of the frontline personnel as much as possible, and made contributions to the "firewall" of the Yangtze River flood control, thereby discharging our corporate social responsibilities.



未來展望

Future Outlook

2021年，現代牧業將繼續精耕細作，秉承「創建世界最先進的牧場，生產世界最優質的牛奶」的經營理念，堅持質量管理最高標準、最嚴要求，致力為每一位消費者提供零添加、真品質的好產品。放眼未來，現代牧業將持續把握機遇與挑戰，勇拓新局，全面提升企業管理水平，積極踐行社會責任、推進產業綠色發展，為引領中國乳業作出貢獻。

In 2021, Modern Dairy will continue with intensive farming, adhere to the business philosophy of “creating the world’s most advanced farms and producing the world’s highest quality milk”, insist on the highest standards and strictest requirements for quality management, and strive to provide every consumer with quality products with zero additives. Looking ahead, Modern Dairy will continue to grasp opportunities and face challenges, explore new opportunities, fully improve corporate management standards, actively fulfill its social responsibilities, promote the green development of the industry, and make contributions to lead the Chinese dairy industry.

綠色經營發展，全面推行低碳未來

Insist on green operation and development, and comprehensively implement low-carbon future

現代牧業將持續推進牧業與生態建設深度融合，加強生態農業循環，通過創新糞污處理模式，結合精準施肥 app，將糞肥資源化，推進能源自給資源循環利用。我們將繼續完善環境管理體系，提升設備改造，強化環保節能理念宣貫，積極踐行企業可持續發展實踐，致力於打造為能源節約型、資源友好型現代化標桿企業。

Modern Dairy will continue to promote the deep integration of animal husbandry and ecological construction, strengthen the circle of ecological agriculture, use manure as resources and promote the circle of energy self-sufficient resources through innovative manure treatment mode and by using accurate fertilization app. We will continue to improve the environmental management system, improve equipment upgrading, strengthen the concept of environmental protection and energy conservation, actively practice corporate sustainable development practices, and strive to become an energy-saving, resource-friendly and modernized benchmark enterprise.

勇擔社會責任，服務社會發展

Shoulder social responsibilities and serve social development actively

現代牧業將堅持以人為本、平等合規僱傭，不斷完善員工職業發展與培訓體系，保持高度重視生產安全與職業健康。我們將繼續完善供應商管理體系，與優質合作夥伴長期共贏發展，並持續組織開展公益活動，積極參與捐助活動，協助貧困地區就業。

Modern Dairy will adhere to the people-oriented concept as well as equal and compliant employment, continuously improve the career development and training system for employees, and maintain a high regard for production safety and occupational health. We will continue to improve the supplier management system, work with quality partners for long-term win-win development, constantly organize public welfare activities, actively participate in donations and assist in employment in impoverished areas.

科學養牛、安全產奶，打造有溫度的智慧牧場

Promote scientific cattle breeding and safe milk production to create a warm and smart farm

現代牧業將打通「牧草種植、奶牛養殖、牛奶加工一體化」產業鏈條，利用數字化管理系統，提高牧場經營效率，助力生產質量管理，打造資源整合發展新優勢。我們將堅持全流程質量管控標準，保障高品質奶源，並不斷加強以動物福利理念為指導的健康養殖模式，有效推動牧業與奶品生產良性發展。

Modern Dairy will open up the integrated industrial chain of “forage planting, cow breeding and milk processing”, use digital management system to improve farm operation efficiency, assist in product quality management, and create new advantages in resource integration and development. We will adhere to the quality control standards throughout the entire process to ensure quality milk source, and continuously strengthen the healthy breeding model guided by animal welfare concepts to effectively promote the healthy development of farms and dairy production.

未來，現代牧業將繼續堅持可持續發展，不斷推進人、牛、自然和諧發展的經營生態，踐行環境、社會和公司管理責任，為消費者提供新鮮、健康、安全的奶品，助推國家乳業高質量可持續發展。

In the future, Modern Dairy will continue to adhere to sustainable development, continuously promote the harmonious development of human, cows and nature as a business ecology, fulfill its environmental, social and corporate management responsibilities, provide consumers with fresh, healthy and safe milk products, and contribute to the high-quality and sustainable development of the national dairy industry.



ESG 指標索引

ESG Indicators Index

層面 Level	內容 Content	披露位置 Disclosure
A1 排放物 Emissions	一般披露 General Disclosure	1.2 低碳綠色牧場 Low-carbon Green Farms
	A1.1	1.2 低碳綠色牧場 Low-carbon Green Farms
	A1.2	1.2 低碳綠色牧場 Low-carbon Green Farms
	A1.3	1.2 低碳綠色牧場 Low-carbon Green Farms
	A1.4	1.2 低碳綠色牧場 Low-carbon Green Farms
	A1.5	1.2 低碳綠色牧場 Low-carbon Green Farms
	A1.6	1.2 低碳綠色牧場 Low-carbon Green Farms

層面 Level	內容 Content	披露位置 Disclosure
A2 資源使用 Use of Resources	一般披露 General Disclosure	1.2 低碳綠色牧場 Low-carbon Green Farms
	A2.1	1.2 低碳綠色牧場 Low-carbon Green Farms
	A2.2	1.2 低碳綠色牧場 Low-carbon Green Farms
	A2.3	1.2 低碳綠色牧場 Low-carbon Green Farms
	A2.4	1.2 低碳綠色牧場 Low-carbon Green Farms
	A2.5	不適用 NA
A3 環境及天然資源 Environment and Natural Resources	一般披露 General Disclosure	1.2 低碳綠色牧場 Low-carbon Green Farms
	A3.1	1.2 低碳綠色牧場 Low-carbon Green Farms
A4 氣候變化 Climate Change	一般披露 General Disclosure	1.3 氣候變化應對 Responding to Climate Change
	A4.1	1.3 氣候變化應對 Responding to Climate Change

層面 Level	內容 Content	披露位置 Disclosure
B1 僱傭 Employment	一般披露 General Disclosure	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
	B1.1	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
	B1.2	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
B2 健康與安全 Health and Safety	一般披露 General Disclosure	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
	B2.1	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
	B2.2	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
	B2.3	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
B3 發展及培訓 Development and Training	一般披露 General Disclosure	4.2 謀進取的「養牛人」 Ambitious "Cow Keeper"
	B3.1	建議披露項，計劃於未來披露 Recommended disclosure item, to be disclosed in the future
	B3.2	4.2 謀進取的「養牛人」(部分披露) Ambitious "Cow Keeper" (partly disclosed)
B4 勞工準則 Labour Standards	一般披露 General Disclosure	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
	B4.1	4.1 高標準的「養牛人」 High-standard "Cow Keeper"
	B4.2	4.1 高標準的「養牛人」 High-standard "Cow Keeper"

層面 Level	內容 Content	披露位置 Disclosure
B5 供應鏈管理 Supply Chain Management	一般披露 General Disclosure	3.3 責任產業鏈 Responsible Industry Chain
	B5.1	3.3 責任產業鏈 Responsible Industry Chain
	B5.2	3.3 責任產業鏈 Responsible Industry Chain
	B5.3	3.3 責任產業鏈 Responsible Industry Chain
	B5.4	3.3 責任產業鏈 Responsible Industry Chain
B6 產品責任 Product Responsibility	一般披露 General Disclosure	2.3 健康及安全福利 Health and Safety Welfare 3.1 高品質奶源 Quality Milk Source 3.2 消費新提倡 New Consumption Proposition
	B6.1	3.1 高品質奶源 Quality Milk Source
	B6.2	3.2 消費新提倡 New Consumption Proposition
	B6.3	不適用 NA
	B6.4	3.1 高品質奶源 Quality Milk Source
	B6.5	不適用 NA

層面 Level	內容 Content	披露位置 Disclosure
B7 反貪污 Anti-corruption	一般披露 General Disclosure	反腐倡廉 Anti-corruption
	B7.1	反腐倡廉 Anti-corruption
	B7.2	反腐倡廉 Anti-corruption
	B7.3	反腐倡廉 Anti-corruption
B8 社區投資 Community Investment	一般披露 General Disclosure	4.3 重執行的「養牛人」 Pragmatic "Cow Keeper"
	B8.1	4.3 重執行的「養牛人」 Pragmatic "Cow Keeper"
	B8.2	4.3 重執行的「養牛人」 Pragmatic "Cow Keeper"