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ABSTRACT

Xiang Ywen Environmental aspects of international business development on the example of Li-Ning, China: SUSU, EM-222, 94 p, 6 tables, 27 pictures, references – 50 names.

In the wave of economic globalization, the development of various regions is more closely integrated with the world economy, the opening to the outside world is expanding and deepening. However, the extensive economic and trade growth methods have caused the economic rise to pay a high ecological price, and all regions inevitably face huge environmental pressures.

The master thesis mainly researches about environmental aspects used during the developing of multinational companies' worldwide business. It takes international sportswear company Li Ning as the research object, the previous academic research as the theoretical basis, intends to analyze the impact of the development of international business on the ecological environment and give suggestions to multinational companies for improving their sustainable development and get more benefits from environmental aspects.

The main purpose of this article is to call on international trade participants to balance development and ecological environment while pursuing economic development, emphasizing, first, that enterprises in the process of sustainable development can obtain environmental benefits and, secondly, multinational corporations must play a leading role in preserving the ecology of the world.

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INTRODUCTION

With the rapid development of world science and technology, the level of global industrialization is accelerating, the speed of economic development is exploding, and the development and utilization of energy is increasing. Therefore, the problem of environmental destruction has become more and more obvious. As an important part of the world economy, enterprises have an important influence on the ecological environment in their production and operation activities. Multinational companies, because of their huge international scale and strong financial resources, they have particularly great environmental responsibilities, which are particularly worthy of attention.

International transaction is the mainstream of economy. For multinational companies, during the development of their international business, the environmental protection measures adopted are aimed at achieving sustainable environmental development through relevant scientific knowledge and technical means, in order to manage existing environmental problems and prevent future environments problem. The accent of the concept of sustainable development of multinational corporations promotes the long-term cooperation of economy, society, culture and environment while also meeting the needs of current social development.

This master thesis studies the main environmental aspects of the activities of multinational companies used in the international market.

Taking Li Ning International Sportswear as a research subject, the aim of the dissertation is to examine the impact of international business on the global environment.

To achieve the goal, it is necessary to solve the following tasks:

- to find the relationship between international trade and environmental problems;
- analyze the activities of Li Ning Company and evaluate its contribution to supporting the environment;

- analyze how to maintain a balance between the development of international business and the ecology of the world through environmental aspects;
- to reveal the prospects for sustainable environmental development of international business.

This master thesis consists of three modules:

1. Theoretical foundations of the impact of international business development on the environment.
2. Case analysis of Li Ning International Sportswear Company.
3. Environmental benefits and suggestion for taking environmental aspects during international business.

The thesis's first chapter is to introduce theories and relevant researches about international business and environment changes. It mainly uses environmental Kuznets curve related with researches of other scholars from different points to have a concept about the correlation between international business develop and environmental problems. That is, the environment change is closely with economic growth. However, with the improvement of technology, when the economic development reaches a certain level, the degree of environmental pollution will gradually slow down, and environmental quality will improve.

In the second chapter, using the Li Ning International Sportswear Company for example, it analyzes how it handles the balance between economic development and environment protection, thus, to supply a certain extent concretizes the current theory. The paper describes Li Ning's functions and does a research of Li Ning Company's recent activities, studies its environmental measures, such as management policies in office, green supply chain management, product safety and so on , evaluates its environmental benefits in financial and international public praise to show representative demonstration for how to hold sustainable concept through international business.

It shows companies actively implementing sustainable development strategies help enhance their international competitiveness. On this basis, this thesis proposes

multinational companies actively fulfill their environmental protection obligations, pursue the concept of green development, and continuously improve their R&D level and save energy costs in order to gain more support from the international community, more development opportunities will be obtained, so its advantages in business efficiency and image will be enhanced.

The third chapter of the study is devoted to the study of the prospects for sustainable development of international business. Recycling of waste and old clothes is one of the factors of sustainable development, which is an example of a circular economy. This is illustrated by the example of leading international sportswear manufacturers such as Adidas, Nike and Li Ning along with them.

Requests from the United Nations represented as 17 Sustainable Development Goals are also placed in the last chapter. Methods and suggestions Li Ning Company taken is in the last to show the importance of taking environmental aspects during international business.

The conclusion is a brief summary of the above content, and all references are listed at the end of the thesis.

For this thesis was used general scientific methods of analysis of literary sources and generalization of data on the research topic; methods of economic and statistical analysis to study the activities of the company.

To analyze relevant data on the impact of human activities on the environment, we used reports on human development published on the UN website. The main economic indicators of Li Ning's company were investigated on the basis of the company's reports published on the company's website.

1 THEORETICAL FOUNDATIONS OF THE IMPACT OF INTERNATIONAL BUSINESS DEVELOPMENT ON THE ENVIRONMENT

1.1 Review of research status

International trade plays an important role in today's world. However, ecological environment plays the basic role in people's daily life. In most countries, at the beginning of foreign trade development, they usually purchase the speed of improvement in industry, but sacrificing the quality of environment. The ignorance of balance in economy and environment leads to the long-term, cumulative environmental disasters.

From the existed materials, we can find at the beginning the development of international economy and trade can promote economic growth and improve people's living standards. Only when the economy improves, the environmental protection industry will develop relatively better, and there will be sufficient funds to manually treat environmental pollution equipment. On the other hand, trade development has improved the country's economy. After people solve their livelihood problems, they will be more conducive to cultivating healthy and safe environmental awareness, which will be more conducive to the country's environmental development.

But in ordinary life, the negative impact on environment from international trade occurs in every aspects of our routine, for example, transport pollution, biological invasion, oil spill and so on. Since the 1970s, environmental problems in the industrialization process of western developed countries have become increasingly prominent, and environmental-related trade disputes have increased day by day. Trade and environmental issues have aroused people's attention.

At now time, discussions and research related to environmental issues also emerged, and trade and environmental issues also became a research focus. Researchers have studied trade and environmental issues from theories, policies, and empirical data. By the 1990s, with various theories getting better and better, trade and environmental issues have once again become the focus of research.

Most of the existing works discuss the global environmental problems and the development of international trade from different aspects, but few results have complete and concrete research based on one company. In this paper, I mainly use case analysis method. The paper attempts to discuss the development and characteristics of global environmental problems, as well as their challenges to the international economy. It interviews an international company- Li Ning Company's annual report and combines with its practices on environmental protection. Finally, it puts forward suggestions to international enterprises on how to do the environmental protection and how to convey the procedures into their international competitiveness.

Research Actuality

In terms of Global environmental issues, some scholars from East and West countries have published many papers in this field. For example, *The Globalization of World Politics: An Introduction to International Relations* edited by John Baylis and Steve Smith, and *The Global Agenda edited: Issues And Perspective* by Charles Kegley and Jr. Eugene Wittkopf, *World Politics (Fifth Edition)*, edited by Bruce Lassitt And Harvey Starr. Wang Yizhou's *New safety mythology of the era of globalization of the international security*, Cai Ta has *The global problems and the contemporary international relations*, shao-jun li's *Introduction to international politics* and so on are involved. These works illustrate the performance of the global environmental problems, characteristics, effects on human, the challenge of international politics, etc. [22, 23, 24, 25, 26, 27]

During my searching, I found western countries have studied the relationship between international trade development and environmental issues earlier than eastern and other countries. And western countries have more researches and deeper analysis. Recently, with the quick improvement of economical society, there are more and more papers about researches of economy and environment.

Research status in western countries

In Jonatan Pinkse and Ans Kolk's book, *International Business and Global Climate Change*, it explores how climate change affects multinational enterprises

(MNEs), focusing on the challenges they face in overcoming liabilities and filling institutional voids related to the issue. Climate change is characterized by institutional failures, because there is neither an enforceable global agreement nor a market morality. Climate change is also a distinctive international business issue, as its institutional failures materialize differently in different countries. As governments are still highly involved, MNEs need to consider carefully their strategies to cope with non-market forces, including their embeddedness in multiple institutional settings. Using some illustrative examples of MNE responses to climate-related components in stimulus packages, we explore MNEs' balancing act concerning their institutional embeddedness (or lack thereof) in home, host and supranational contexts as input for further research on the dynamics of MNE activities in relation to climate change [28].

British author R. De Palma and V. Dobes's work *An integrated approach towards sustainable entrepreneurship – Experience from the TEST project in transitional economies, use a test to analyze the efficiency of enterprises*. This paper describes the TEST approach and results by presenting: –Theoretical framework for an effective and efficient integration of the tools of preventive environmental management. –Approach, methodology and toolbox to address all levels of the enterprises. –Empirical results obtained through the implementation of the TEST in 17 enterprises of the Danube Region. The TEST approach has proved to be an effective learning process for addressing complex challenges that the companies had been facing. It helped them to improve their economic and environmental performance by integrating the bottom-up and top-down learning perspectives [29].

A very implied research did by DMWN Hitchens, named *The Influence of Environmental Regulation on Company Competitiveness: A Review of the Literature and Some Case Study Evidence* is concerned with the effect of environmental regulations on company competitiveness. [30] There are two parts: the first provides an overview of the literature on the general question as to what is the relationship between environmental regulations and economic performance. The second reports the findings of a study of the effect of environmental regulation on the competitiveness of food

processing firms across four countries and six regions in the EU. Firms located in these regions face different regulatory policies and it is argued have differing capabilities to absorb environmental compliance costs.

In A Requirements and Framework for the Sustainable Company, there are some reviews of relationship between companies and environment. For example, a paper by Gray and Shadbegian, they use a basic study of plants in three industries in the US (pulp and paper, oil refineries and steel mills). They found a negative relationship between a plant's pollution abatement costs, i.e. the extent to which it was regulated, and productivity. The result is the heavier the pollution and regulation is, the lower the productivity is. They found it cannot induce productivity benefits large enough to outweigh the measured compliance costs by raising environmental performance in these industries. Another research studied by Barbara and McConnell finds of five heavily polluting US industries. They attempted to measure some of the positive impacts of regulation. They measured the direct effects of regulation, these are the direct pollution abatement costs, and these always have a negative productivity effect, because they add to total input costs. They also measured indirect effects, the change in inputs required to manufacture the core products of the business. This has the potential for offsets. The third study undertaken by Repetto tested the hypothesis that superior environmental performance tends to lead to lower profitability than inferior environmental performance, within a same industry. This is the standard hypothesis, better environmental performance comes at a cost, so that firms need to divert resources to reduce their emissions and must sacrifice profits. He tests this hypothesis against the Porter hypothesis, that firms motivated to find solutions to environmental problems, by regulation, find previously overlooked cost saving opportunities to improve processes, reduce waste or redesign products. In particular he tests the form of the Porter hypothesis that firms with superior environmental performance also achieve superior profitability within their industries [31].

In Russian authors Anastasiia Moldavskap and Torgeir Welo's researches, they mainly talk about CSA. The paper A Holistic approach to corporate sustainability

assessment: Incorporating sustainable development goals into sustainable manufacturing performance evaluation sees Corporate Sustainability Assessment (CSA) in manufacturing is a framing of tools that guide the organization toward sustainable practices and indicate how the same organization contributes to a global Sustainable Development (SD). In addition to the discussion about shortcomings of existing CSA practices, the need to incorporate UN Sustainable Development Goals (SDGs) into reporting has been advocated by the sustainability society. This paper proposes a new CSA method for manufacturing companies in which 1. sustainability is seen as a process of directed change, 2. assessment tool is designed by modeling manufacturing company using systems representation, and 3. assessment of Corporate Sustainability (CS) is context-based and linked to SDGs. The proposed CSA method takes a holistic view on Sustainable Manufacturing (SM) and CS [32].

Elena Balashova, Sabina Sharipova' dissertation Impact of ecosystem services on a sustainable business strategy in urban conditions analyzes the relevance and state of the theory of ecosystem services. A solution for achieving sustainable development goals through the use of ecosystem services in industrialization is proposed. Cases of enterprises British American tobacco, Nestlé Waters, Watershed Agricultural Council, Bain & Company, McKinsey & Company, The Starbucks on the application of ecosystem services are considered. A link has been established between public-private partnerships in the provision of ecosystem services. Tendencies of development of ecosystem services in Russia and abroad are defined. Recommendations for companies that have started creating ecosystem services are presented [33].

Research status in eastern countries

Most Eastern countries are developing countries. For developing countries, because they lag behind the industrialization process of Western countries, many countries choose to sacrifice the environment to develop their economy vigorously in the early stages of economic development. However, in terms of historical experience, it is unreasonable to develop industry at the expense of the environment. The research on the internal relationship between international trade and the environment by scholars in

Eastern countries mostly focuses on summing up Western experience and summarizing the causes of environmental degradation. There are also many studies on how to fight for their own economic interests under the basic ecological requirements of protecting the environment.

Regarding changes in the environment at different stages of trade, Wang Hualing's Research on the High Quality Development of International Trade under Ecological Environment Protection pointed out that both free trade and trade protection have had an impact on the ecological environment at different historical stages.[34] Trade is also present in different stages of ecological environment construction. The wave of trade liberalization brought about by globalization has exacerbated the deterioration of the ecological environment. Therefore, taking the road of high-quality development of trade is an inevitable choice to promote the harmonious development of international trade and the ecological environment. Developing countries can only avoid the adverse consequences of ecological colonization by enhancing technological innovation, enhancing the level of corporate management and other means to enhance their trade competitiveness and participating in the formulation of international rules.

About causes of global environmental problems, from Looking at the emergence and resolution of global environmental problems in the "Prisoner's Dilemma", in this article, Sheng Jin uses Prisoner's Dilemma (A.W. Tucker) to analyze the important causes of global environmental problems. For the prisoner's dilemma, Pareto's effective strategy is not to confess. However, because the two prisoners did not trust each other, did not coordinate their actions, and shirked each other's responsibilities, things were counterproductive, and everything was lost. Reflecting the current world, countries in order to rapidly develop their own national economy, with their own self-interest, led to today's uncooperative and polluted world [35].

Sheng Jin also used another example of collective irrationality that is more closely related to environmental issues – the "tragedy of the commons" (G. Hardin) as a reference. In this experiment, people can't see the whole picture. They just want to increase their herd infinitely in a limited world. Everyone pursues his own best interests

and believes in his freedom on the commons. Ultimately, the freedom of the commons led to the destruction of all shepherds. In her conclusion, international business can certainly lead the irregular "economic man" to the collective order, but it is the failure and ineffectiveness of the "invisible hand" of the market that has caused mankind to fall into one difficulty after another. Every "economic man" starts from his own self-interest and works for the best interests of the individual, but the result is backfired and all losers. The deterioration of the global environment is one of them [12].

With game theory method, Yang Xiaoli's article *Analysis of the International Dimensions of Environmental Issues and Game Theory Model* analyzed the international dimensions of environmental issues. This article mainly deals with two aspects. One is the relationship between foreign trade and the environment; the other is pollution across national borders. She pointed out that the environmental pollution caused by trade and cross-border exchanges is mainly manifested in five aspects: dependence on the environmental resources of other countries; the impact of import and export on environmental resources in production and consumption; the transboundary movement of hazardous waste; transportation has an impact on environmental resources; the expansion of international exchanges has an impact on environmental resources; international exchanges have an impact on environmental resources through changes in the production and consumption structure. She conducted an in-depth analysis on the issue of global warming and predicted that the global climate will continue to develop in the direction of warming in the next 50 years, and it will cause long-term and huge economic losses of more than 80 billion U.S. dollars [36].

Yang Xiaoli constructed a game theory model and concluded that under the non-cooperative game, the international community's use of international environmental resources and pollution control are inefficient. [36] In order to achieve a cooperative game, the main body of transnational trade-the two countries and even more countries, must realize self-restraint, and also consider the following factors: whether to reach a broadly binding agreement with each other information and transaction costs; Whether self-supervision and punishment are clearly defined, and whether there is a clear

definition of the right to use public resources. Individuals in cross-border trade can also use internally connected games to deal with the negotiation of cross-border pollution and other issues, such as trade barriers, to model the idea of related negotiations and form an alternative to unilateral payment. Make cooperation further, thereby also improving the overall welfare of the world, and achieving the best governance of environmental issues in the international dimension.

Due to the consideration of international trade and environmental issues based on global public goods, the vast number of developing countries, due to their disadvantaged position in global challenges, and due to global negative externalities, has suffered much more than developed countries. As a global public good, the environment has had a great negative impact on developing countries in the process of economic globalization.

In fact, politicians from various countries have placed national interests overriding everything in their vision and the scope of their decision-making influence. However, the challenge to us by environmental issues is indeed global. In the article Ping Xinqiao – Global Public Goods (GPG) and Our Countermeasures, Ping mentioned that global environmental issues are closely connected with international relations and international economic trade. In order to safeguard the common interests of mankind, different countries and governments must cooperate on a certain international agreement. Protecting the ecological environment is the fundamental requirement for human survival and development. In this article, Ping proposed that since the 1990s, infectious diseases, global environmental problems, global economic crises and conflicts, international currency crises and financial risks, the Internet and the global diffusion of knowledge as well as the severity of international terrorism, have affected the importance of environmental issues in economic exchanges. Finally, and the most fundamental reason is that economic globalization, regional interests, the independence of local groups, and the trend of division are parallel, making the environmental challenge to us more and more severe [37].

Ping proposed that in response to global environmental problems, we should create a new global market form and internalize externality.

Research status in other countries

In *Enterprises Communication in e-Environment: Case Study of Latvia and Kazakhstan*, Vita Stige-Skuskovnika, Inga Milevica, shows that proper and skilful use of modern technologies can contribute to significant development of multinational companies. [38] Growth of technologies occurs rapidly, and the electronic environment continuously develops and improves along with it. The electronic environment now already offers companies practically all necessary marketing and communication tools for ensuring company development by creating competitive advantages; nevertheless, not all companies can employ the opportunities rendered by the e- environment, in order to increase company competitiveness and productivity. The paper studies and compares the enterprises communication in e-environment in two countries – Latvia and Kazakhstan. It studies 130 enterprises of Latvia, 100 enterprises of Kazakhstan and uses survey method. The study was conducted within the Erasmus+ project ‘Mobility between programme and partner countries. It uses previous researches and scientific studies, as well as survey of enterprises representatives in Latvia and Kazakhstan, in this paper, the authors give an overview of the main trends of enterprise communication in e-environment and compare the experience of the two countries.

Aysha Fleming, Russell M. Wise, Heidi Hansen, Linda Sams’s paper, *the sustainable development goals: A case study*, they analyze an Australian salmon aquaculture company. [39] The Sustainable Development Goals or SDGs are an ambitious step towards sustainable development, taking a much broader view of sustainability than ever achieved previously, yet practical challenges remain, including how to implement change. The aims of this research were to determine how an influential aquaculture company in Australia - Tassal, Tasmania's largest salmon aquaculture company - perceived the SDGs, and to ascertain the motivations and barriers for Tassal to work towards implementing the goals. Interviews were conducted with leaders, employees and external business partners. Tassal was not aware of the

SDGs prior to this project but were open to considering implementing them in their current sustainability practices. The survey responses were analyzed using the Values-Rules-Knowledge framework of decision making. Key findings were: 1) corporate and personal values were the key component driving Tassal's positive responses to the SDGs; 2) awareness of the SDGs resulted in Tassal recognizing the potential gains from engaging with some of the seemingly less aquaculture-related goals (such as health and wellbeing). These findings demonstrate that businesses can fruitfully engage with the SDGs, even without government requirements or societal expectations, if they are prepared to broaden their interpretation of business sustainability and be reflective about their values. The vrk model is a potentially useful addition to current SDG and sustainability tools, such as those of the UN Global Compact, as a way to diagnose organizational barriers to adopting practices aligned with the SDGs. An emerging area of importance to social, economic and environmental sustainability – social license – was also identified as implicit in many, but not explicit in any of the SDGs.

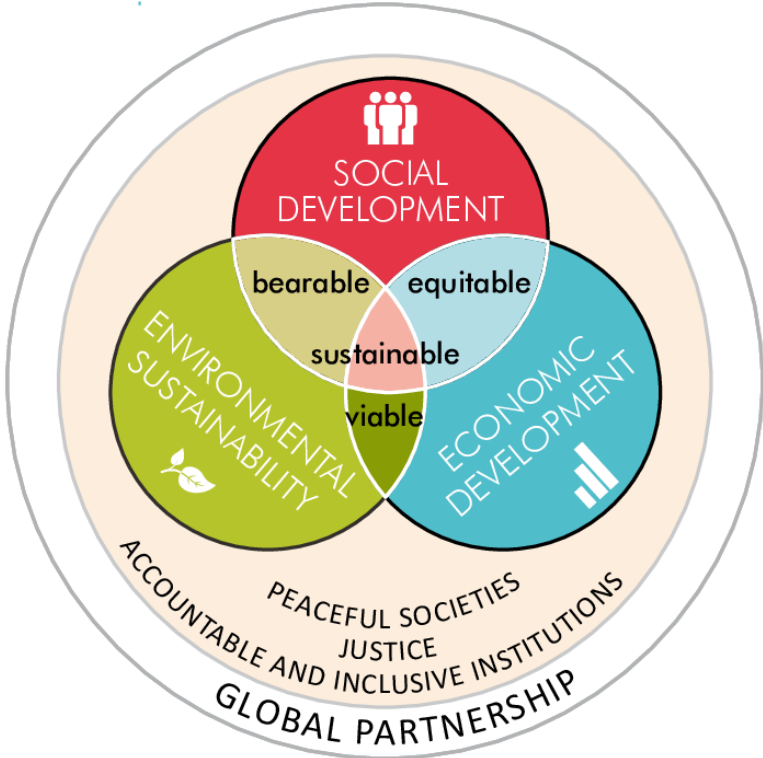
1.2 The concept of sustainable development as the basis of analysis of business and environmental interactions

Sustainable development is a socio-political concept of human development, which presupposes the harmonious development of nature and man, namely "the interaction of economic growth, social development and environmental protection, in order to meet the needs of existing and future generations of the population of all countries" .

At the end of the 1960s, humans began to pay attention to environmental issues. On June 5, 1972, the United Nations convened the "Human Environment Conference", which put forward the concept of "human environment" and adopted the Declaration of Human Environment to establish the UNEP [1].

The concept of sustainable development was first formally discussed at the United Nations Conference on the Human Environment held in Stockholm in 1972. This seminar brought together representatives of industrialization and developing countries

around the world to jointly define the rights that mankind enjoys in creating a healthy and vigorous environment. Since then, countries have worked hard to define the meaning of sustainable development. There have been hundreds of definitions that have been drafted, covering international, regional, local, and sector-specific levels.



Picture 1.1 – Dimensions of sustainable development

Sustainable development is a socio-political concept of human development, which presupposes the harmonious development of nature and man , namely "the interaction of economic growth, social development and environmental protection, in order to meet the needs of existing and future generations of the population of all countries." (Picture 1.1)

In history, we can find a series of environmental disasters in the 1950s - 1960s brought the problem to the fore. Thalidomide poisoning has caused cases of congenital malformation in infants. This was followed by the Torrie Canyon tanker accident and the Three Mile Island nuclear power plant accident. At the same time, Swedish scientists found that the death of fish and other living organisms in thousands of lakes in

the country is associated with the transboundary air transport of pollution from Western Europe.

In 1972 the model of human development developed by the Club of Rome and published in the book "The Limits to Growth" caused a great resonance. The essence of this study lies in the fact that the earth's resources are not infinite, and if the same rates of human development are maintained and no measures are taken to protect the environment, they will be depleted by the year 2000, which will lead to catastrophic consequences.

Thus, by the early 1970s, the world community, realizing the importance of the problem of the coexistence of man and nature, included the discussion of this problem on the agenda of almost all major international forums. Among the most significant international documents that form the basic norms and provisions of the concept of sustainable development in international law , five can be singled out: the 1972 Stockholm Declaration on the problems of the human environment, the report of the Brundtland Commission "Our Common Future", the 1992 Rio de Janeiro Declaration Environment and Development, Millennium Declaration and 2002 Johannesburg Declaration on Sustainable Development [2].

The 2008 global financial crisis, which began back in 2008, had a great impact on the implementation of the concept of sustainable development. A huge problem in the implementation of the concept of sustainable development is fragmentation among various actors in international relations. All participants pursue their own interests.

The report of the High-Level Panel on UN System Coherence in Development, Humanitarian Assistance and the Environment, entitled "Delivering as One", has been instrumental in overcoming this challenge. The report contains a number of recommendations aimed at overcoming the fragmentation of the United Nations in order to ensure the delivery of one system as a whole, in true partnership with all countries and to meet their needs in their efforts to achieve the Millennium Development Goals and others, internationally agreed development goals. It was suggested that central

mechanisms be established to provide a more logical system of governance, funding and management [40].

Johannesburg also paid great attention to this problem. More than 300 voluntary communities were created, each of which was to raise additional resources to support efforts to achieve sustainable development.

Dialogue between stakeholders, especially governments, civil society and the private sector, has reached a new level. The main challenge is to get businesses and make businesses to follow the principles of sustainable development. In order to solve this problem at the World Economic Forum on January 31, 1999, Kofi Annan in his speech invited business leaders to join the international initiative - the Global Compact. The treaty calls on the business community to be guided by nine fundamental principles in the areas of human rights, labor standards and environmental protection . Environmental principles include a commitment to the precautionary principle, increasing business responsibility for the environment, and promoting the development and diffusion of environmentally sound technologies.

It should be noted that business itself often takes such an initiative. For example, several international banks have adopted the so-called Equator Principles, according to which the bank commits itself to provide loans only to those projects whose sponsors can prove the ability and willingness to comply with social norms and environmental protection requirements. The structure of the World Bank has a huge impact on financing projects aimed at sustainable development, which in the early 1990s radically changed its internal rules for financing. At the moment, the Bank does not issue loans for projects that threaten the environment or violate human rights. The action of the World Trade Organization (WTO) should also be noted. Its activities are aimed at increasing trade between countries and therefore largely helps to attract new financial resources to developing countries. All WTO actions in the field of trade and economic policy "should be carried out with the aim of improving living standards ... expanding production and trade in goods and services with the optimal use of world resources in accordance with the goals of sustainable development."

International business, particularly, transnational corporations (TNCs) play an important role in achieving sustainable development. They have accumulated a huge amount of financial resources that can be used to achieve sustainable development. That is why the task of attracting TNCs to the implementation of development goals is becoming the most urgent.

As defined by the World Business Council for Sustainable Development (WBCSD), eco-efficiency is achieved by producing competitive goods and services that fully meet consumer needs and improve quality of life, while gradually reducing resource intensity and environmental impact, which should be reduced until such time. until it reaches at least the limit when the Earth is already able to independently overcome these influences. Thus, the concept of eco-efficiency is the embodiment of the idea of sustainable development as applied to business [3, 4].

The Eco-efficiency concept was originally developed in 1992 by the World Business Council for Sustainable Development (WBCSD) specifically for companies to put entrepreneurship on a sustainable path [5].

As a practical guide, the concept has been adopted by many companies around the world. It has proven effective at the micro level and has become one of the driving forces driving modern business towards sustainable development. The concept is practiced, as a rule, in countries with high prices for natural resources and developed environmental legislation.

According to this concept, eco-efficiency is achieved by creating competitively priced goods and services with high useful properties that satisfy human needs and improve the quality of life, while reducing the environmental impact throughout the entire life cycle of products to a level corresponding to the estimated assimilation capacity of the Earth [6].

Eco-efficiency in entrepreneurship is achieved through:

- reducing the consumption of materials in the production of goods and services;
- reducing the energy consumption of production;
- reducing the generation of toxic waste;

- increasing waste recycling;
- maximizing the sustainable use of renewable resources;
- extending the service life of products;
- increasing the maintenance of goods and services.

However, as world practice shows, the use of the “Eco-efficiency” concept at the level of enterprises and organizations does not ensure a cardinal transition of national economies to nature-saving development. In developed countries, the main reason for this is unsustainable consumption, in developing countries - low market prices for natural resources and undeveloped environmental legislation.

To achieve high efficiency in the use of natural resources and minimize environmental impacts to the theoretically possible level, ESCAP (Economic and Social Commission for Asia and the Pacific) recommends that national governments use the principles, indicators and tools of eco-efficiency in strategic planning, i.e. at the macro level [7].

The eco-efficiency of national economies is measured using a system of indicators. Initially, eco-efficiency indicators were developed to assess the sustainability of production, therefore they were the ratio of indicators of economic (financial) and environmental performance of an enterprise or industry.

According to the eco-efficiency methodology, a variety of indicators can be constructed depending on the specifics of environmental and economic problems. This explains their diversity. There are three main groups of eco-efficiency indicators [8].

1. The ratio of two environmental components to each other in natural units of mass or volume. For example, the amount of waste (in tonnes) / total resource consumption for production (in tonnes).

2. The ratio of environmental performance in terms of mass or volume to financial performance in monetary terms. For example, the volume of CO₂ emissions (in tons) / sales volume (in monetary units); net profit / total water consumption (in tonnes).

3. The ratio of environmental performance, expressed in monetary units, and the financial performance of the enterprise. For example, profit / payment for energy consumption.

As can be seen from the above examples, when calculating eco-efficiency indicators, in addition to the financial component, one of the indicators of the environmental performance of enterprises is necessarily used. The methodology for assessing the eco-efficiency of an enterprise is quite applicable for any level of management, including the meso-level (for industries and regions of the country) and the macro-level (for the entire national economy).

The theory of sustainable development requires not only a transition to sustainable production, but also to sustainable consumption, which at the macro level can be assessed using indicators of resource consumption and waste generation per capita.

As the well-being of the population grows, consumption in the household sector becomes irrational, especially in rich countries. Living space is increasing, energy and water consumption is increasing, more material goods, food and various commercial services are purchased, including various electrical appliances, personal cars, the use of taxis and air carriers, etc.

At the same time, the industrial development of countries is accompanied by the process of urbanization and the emergence of megacities. Through the formation of a sustainable urban infrastructure, as the world experience shows, it is possible to achieve an improvement in the indicators of consumption of natural resources and the generation of waste per capita.

It is necessary that the environmental performance indicators used to determine the eco-efficiency indicators are linked to the most significant global, regional, national environmental problems and reflect the degree of “contribution” of the enterprise / country to these problems. It is very important at the national level to measure the direct contribution of the country to the problem and rely on reliable data provided by the statistical authorities.

To determine a set of priority environmental performance indicators, it is necessary to select the most significant environmental issues. For example, Kaspar Mueller and Andreas Sturm, in the Standardized Eco-efficiency Indicators report, recommend recognizing the following environmental issues as the most significant:

- depletion of non-renewable energy resources;
- depletion of fresh water resources;
- global warming;
- depletion of the ozone layer;
- placement of solid and liquid (including hazardous) waste.

WBCSD, in turn, proposes to be guided by the following priorities when assessing the contribution of enterprises to global problems:

- total energy consumption;
- consumption of material resources;
- consumption of water resources;
- emissions of greenhouse gases into the atmosphere;
- emissions of gases that deplete the ozone layer into the atmosphere.

ESCAP, in turn, recommends answering the following key questions in order to select priority eco-efficiency indicators that will allow monitoring the quality of economic growth in the future:

1. How can the eco-efficiency of national economic growth be measured or what indicators can countries use to measure eco-efficiency?
2. Is the infrastructure becoming more or less eco-efficient or is the infrastructure delivering more services per unit of waste generated? (primarily energy, transport and construction services, etc.)
3. Does the current fiscal system contribute to the improvement of the quality of consumption or do the ways (patterns) of consumption become more eco-efficient with increasing incomes of the population?
4. Are technological and product innovations actively applied in the business sector leading to more eco-efficient production and consumption?

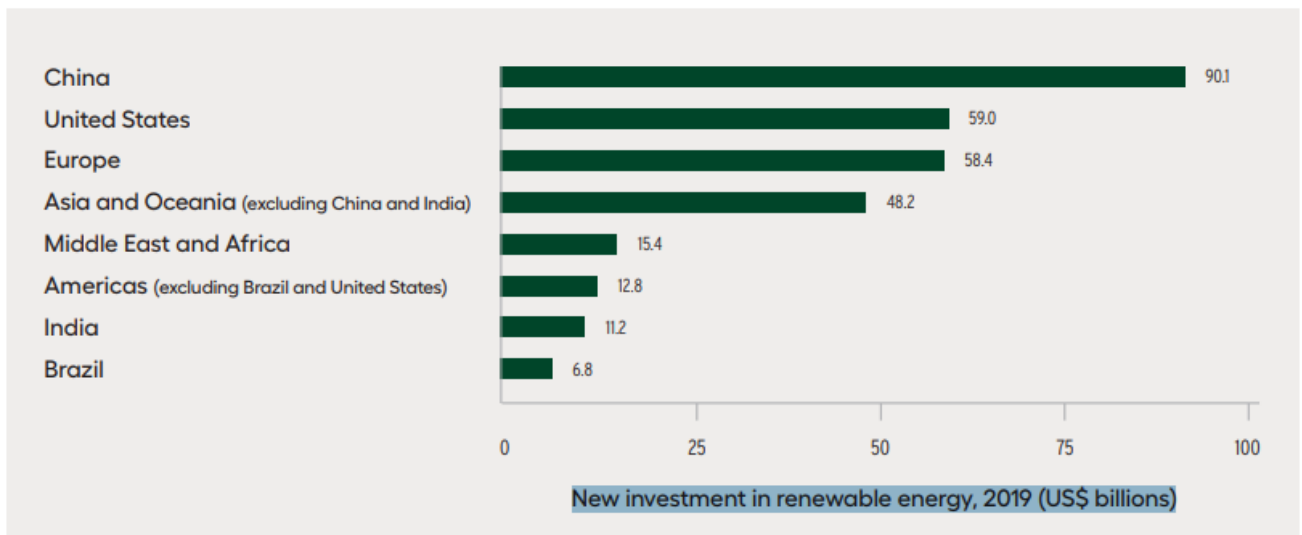
Important steps in the development of national green growth strategies are:

- selection of priority for the country indicators of eco-efficiency;
- using them to determine the level of eco-efficiency of the country, the values of which in dynamics will make it possible to see progress towards achieving the goals of "green growth";
- international comparison of eco-efficiency indicators for setting targets;
- determination of national goals for «green growth» (target values of priority indicators of eco-efficiency)

1.3 Correlation between international trade and the ecological environment

With the development of society and the advancement of science and technology, the relationship between international trade and environmental protection is not an antagonistic relationship, but a dialectical and unified relationship with each other. On the one hand, a country's environment and resource conditions have a binding effect on international trade, and the development level of international trade will also directly affect the environment; on the other hand, both international trade and environmental protection have the common goal of benefiting the people. In fact, a country uses natural resources rationally in foreign trade and uses the results of trade to improve its governance capabilities, which in turn can promote the balance of the ecological environment.

In recent years, the country has paid more and more attention to the development of international trade and environmental protection (Picture 1.2).



Source: REN21 2020.

Picture 1.2 – New investment in renewable energy in Year 2019 [No]

Across the world, national policymaking has taken up the charge for promoting renewable energy. In 2019, many regions have implemented laws about new investment in green manufactory. China has invested 90.1 billion US dollars, United States has invested 59.0 billion US dollars, Europe has invested 58.4 billion US dollars, Asia and Oceania have invested 48.2 billion US dollars, Middle East and Africa have invested 15.4 billion US dollars, Americas has invested 12.8 billion US dollars. India has invested 11.2 billion US dollars and Brazil has invested 6.8 billion US dollars.

From such data of the picture above from United Nations, we can see that green energy and sustainable development are increasingly paid attention in recent years by most of the regions all over the world. Green growth is valued in all procedure of our foreign trade.

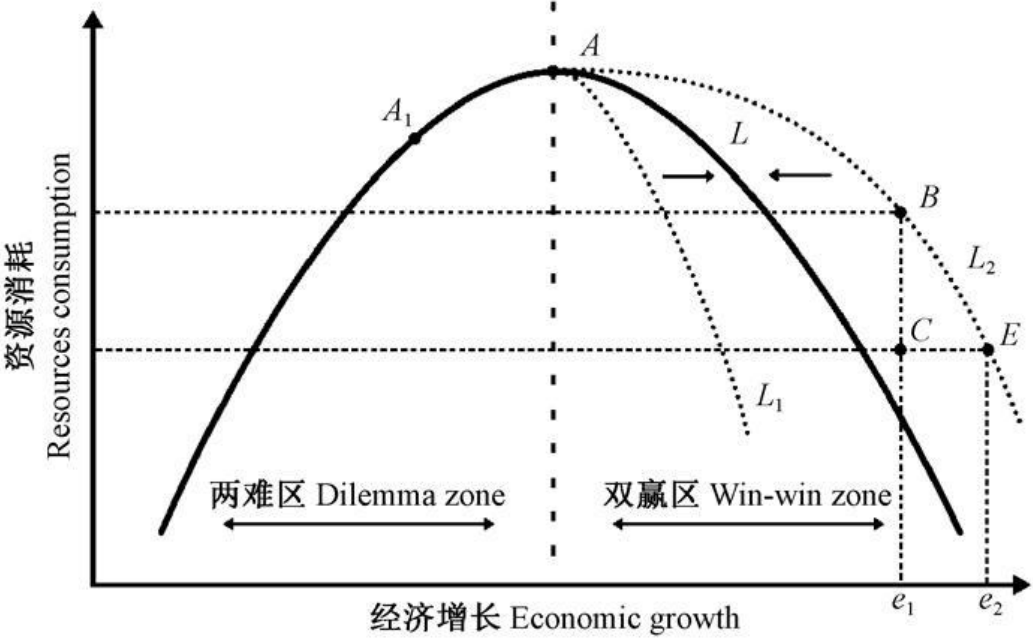
In this part, I analyze and study the internal relationship between international trade and environmental pollution. Then I deeply discuss the negative effects of international trade on the environment from the scope of production and consumption. At the same time, I analyze the mechanism of mutual promotion between international trade and environmental protection. On this basis, using game theory methods, this article analyzes the establishment of a model for international trade and environmental protection issues. The analysis results show that the separate game between the two is

easy to fall into the "prisoner's dilemma", and the related game makes it possible to break through the "prisoner's dilemma" because of the existence of the cooperative interests of both parties in the game.

The relationship between international trade and the ecological environment is inseparable. The destruction of the ecological environment has a restrictive effect on social benefits, and it also affects the game and competition of the world's economies.

With the development of globalization, the level and scope of international trade are getting deeper and deeper. The development of international trade derives many environmental problems. The technology, economic exchanges, and scale of international trade will affect the ecological environment to a certain extent.

Active international trade plays an important role in the economic development of a region and can also improve the ecology of the region to a certain extent. Through international trade, countries can consider the optimal allocation of resources on a global scale and use economies of scale and specialized division of labor to maximize welfare and economic growth. The increase in economic strength has provided sufficient funds for environmental governance. Environmental Kuznets Curve has shown that the degree of environmental pollution shows a trend of first increasing and then decreasing with the growth of per capita income.



Picture 1.3 – Environmental Kuznets Curve

When a country's economic development level is low, the degree of environmental pollution is relatively light, but as per capita income increases, environmental pollution goes from low to high, and the degree of environmental degradation increases with economic growth; when economic development reaches a certain level That is to say, after reaching a certain critical point or "turning point", as per capita income further increases, environmental pollution decreases from high to low, the degree of environmental pollution gradually slows down, and the environmental quality is gradually improved. This phenomenon is called the environmental Kuznets curve (Picture 1.3).

When the per capita income level rises to a certain level, people's demand for the quality of the living environment will increase significantly, prompting them to actively use clean technologies to improve the environment, purchase environmentally friendly products, and reduce environmental pollution from the consumption link.

But looking at the overall situation, when international trade grows to a certain value, it can no longer bring any benefits to the economy. If international trade continues to grow, there may be negative economic returns, the most serious of which is the negative economic returns caused by environmental problems. Compared with the regional economy, the environmental pollution, waste of resources, and ecological damage brought about by international trade have a larger scope and stronger influence, and pollution control has become more difficult due to geographical, policy and other factors.

In procedure of international trade, the impact of on the environment is mainly reflected in the two categories of production and consumption. According to the theory of the effects of the international trade environment, the effects and effects of international trade on the ecological environment are mainly divided into technical effects, structural effects, and scale effects. Among them, technical effect is the main basis for analyzing the formation mechanism of ecological pollution, and the formation mechanism of ecological pollution in international trade can be discovered through technical effect. In the context of international trade, the cost of manufacturing goods

that includes ecological costs is higher. In the case of the same cost, the supply of commodities that do not consider ecological costs will be far greater than the supply of commodities that include ecological costs. Under the economic globalization, the structural effect of goods also brings about huge pollution. For developing countries, most of their exports are resource-intensive and labor-intensive products. In order to catch up with the footsteps of developed countries, they used extensive development mode in the early stage of development. This has brought about incurable environmental problems and irreparable waste of resources to these developing countries with weak technological and economic strength. As for developed countries, they are constantly transferring pollution to smaller, poorer countries to meet their environmental goals [50].

Higher human development countries concentrate most of nature's contributions without fully internalizing the costs generated in the process. Two tales of environmental inequalities in human development across countries are reflected in the dispersion of values along the horizontal axis of two environmental outcomes in Picture 1.4. The Environmental Health Index measures the benefits of a sound relation with the planet in terms of clean air and water and effective management of waste and residuals. The Index of Material Footprint per Capita reflects use of materials for domestic consumption. (Picture 1.4)

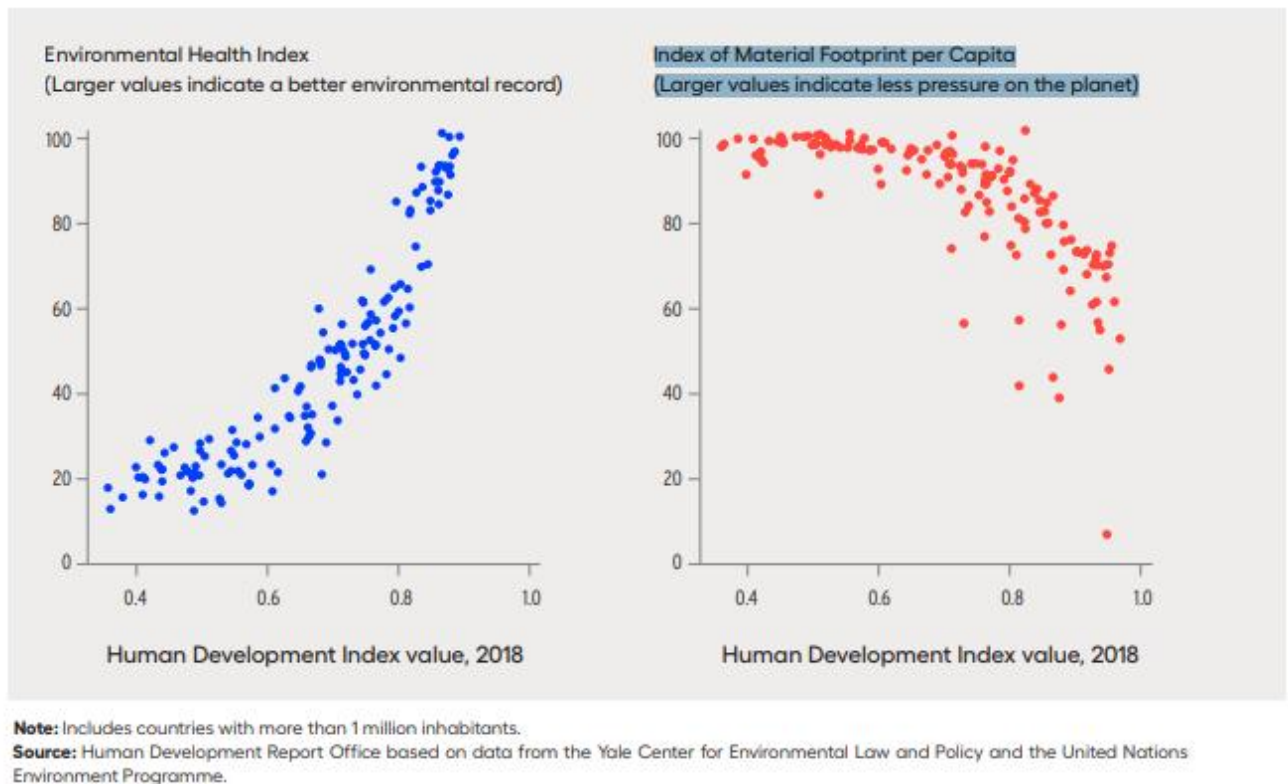
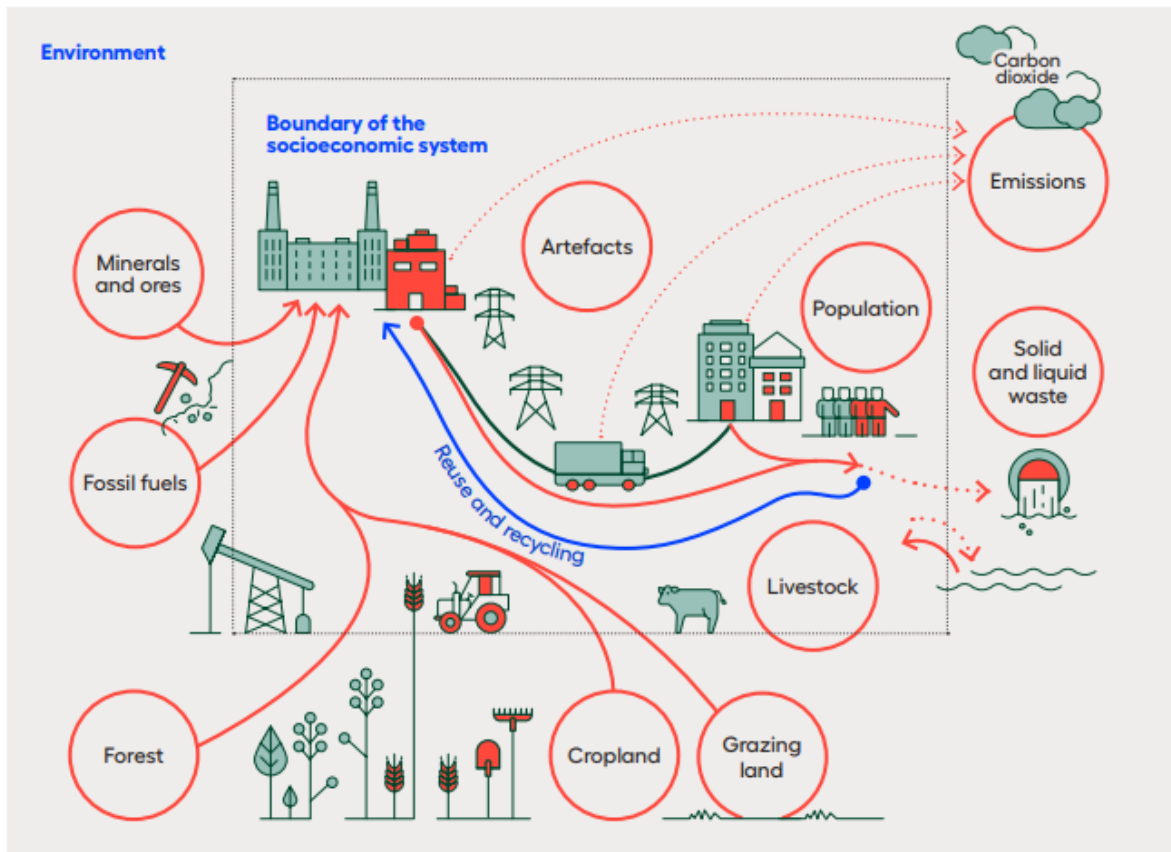


Figure 1.4 – Two tables of environmental inequality

Striking inequalities emerge across countries.

Low human development countries face substantial environmental challenges (they have low environmental health scores) and use much less material resources than countries at the other extreme. Higher human development countries have higher environmental health and material use scores [11].

However, the world ecology is an entirety, since the natural expansion of international trade is achieved through free trade, it is necessary to consider export commodities that have not achieved free trade. After free trade, the costs faced by commodity manufacturers will increase from domestic prices to international prices, domestic demand for commodities will further shrink, and commodity exports will increase. Then the corresponding commodity output will continue to grow, and international trade will expand. However, if the corresponding ecological governance measures are not adopted, the increase in the scale of commodities will increase the industry's pollution of the ecological environment.



Source: Haberl and others 2019.

Picture 1.5 – Circle within the economic and ecology system

Human societies are imbedded in the biosphere: Energy and biophysical resources are used to build stocks and provide benefits for humans while generating waste and emissions. And then, the pollution reuses and recycles in ecological system. The emissions lead to global warming, over-exploitation of mineral resources leads to land subsidence, deforestation aggravates sandstorms, the oceans are polluted, and the islands sink. All them not only hinder the development of international trade but also finally destory human beings. Green development of international trade is urgent. (Picture 1.5)

Under the prevailing concept of sustainable development and the supervision of the government and international organizations, as well as the promotion of green consumption consciousness of every global citizen, environment-friendly development mode has become the future trend of every enterprise.

But in game theory, we easily learn that the best choice for an individual is not the best choice for a group, and the rational choice of an individual often leads to the irrationality of the group. Even when co-operation is mutually beneficial, it is difficult to maintain it.

The tragedy of the commons in game theory is the irrational result of the agglomeration of many individual rationalities. Because each country wants to expand its own interests and impose externalities on others. For example, in international trade, due to the cost of pollution control, enterprises involved in international trade will do everything possible to externalize their enterprises. Although each country knows it will lead to pollution or environmental degradation, the optimal strategy for individual game is to let pollution go. The tragedy of the Commons in international trade can also be analyzed by using the prisoner's dilemma, and we can use the environmental pollution caused by international trade to analyze. If the enterprises of two countries are engaged in production respectively, the production activities of each country will produce certain side effects, for example, the air pollution caused by ship transportation in international trade. Next we looked at whether a country was doing anything about pollution. The cost of taking action against air pollution caused by the transport of goods in international trade is 20 for both countries, and the cost of not taking action is 0. In addition, taking such action will result in the value of both products rising. Suppose there are firms in two countries, firm A and firm B. Both enterprise A and enterprise B take measures to control pollution, and the value of their products is 40. When one firm takes measures to control pollution and the other firm does not, the value of both companies' products is 30. Both companies take no action, and the value of their products is 16 (lower than international price) .

Therefore, if Country A takes measures and Country B does not take measures, the product benefits available to Country A will be:

Benefit for Country A: $30-20=10$

while the benefits available to Country B will be :

Benefit for Country B: $30-0=30$

Obviously, Country A will not take measures alone. If both countries take no action, the gain for both sides is:

$$16-0=16$$

Both countries take measures and the gain for both is:

$$40-20=20$$

Table 1.1 – Benefits of Country A&B

Country B	Obey	Violate
Country A		
Obey	20	A: 10 B: 30
Violate	A: 30 B: 10	16

According to the game analysis, for the pollution problem generated in the international trade, the result must be that both sides of the trade do not take measures.

When country A takes action, the optimal choice for country B is to take no action, and similarly, when country B takes action, the optimal choice for country A is still to take no action. The result of both parties not taking action is also called the dominant strategy, that is, no matter how the other party chooses, their choice is still not to take. This game reveals the environmental problems caused by the tragedy of the commons in international trade.

For countries with very high human development index, they have less emission of carbon dioxide and relatively fewer environmental threats now. That’s shown in Appendix A.

Also, for multinational companies, adhere to the green environmental protection strategy can bring best interests for the global economy development, but in the low level of science and technology, green production costs are high, and the case of small supervision laws and regulations, no additional environmental value model of economic development may be able to let oneself quickly occupy the market, with smaller cost to

obtain greater economic benefits. For companies, they purchase their own business. Therefore, enterprises ignore environmental protection, although it does not meet the requirements of sustainable development of society, but it is a means for them to quickly make profits, occupy the international market, and develop the economy.

In the consumption link, the prices of commodities continue to rise after being included in the cost of eco-environmental governance, which reduces consumers' desire for consumption. The consumption at this time will be less than the demand not included in the time-consuming ecological environment governance. In free trade, commodity prices will continue to decrease to commodity prices in the international market, and the continuous increase in the scale of consumption will increase the scale of imports, which in turn will increase the overall social benefits.[46] However, in the process of continuous consumption growth, ecological pollution has also been correspondingly improved, which has led to a continuous decline in social benefits. Analyzed from the perspective of scale effect, the loss of income brought about by the rapid increase in consumption pollution may be greater than the social benefits formed by the growth of international trade. History shows that the beneficiaries of international trade are western developed countries. Due to the weak environmental protection awareness of underdeveloped regions and countries, and the imperfect supervision system, the terms of trade and ecological links have gradually deteriorated. Generally speaking, technical effects and structural effects are difficult to offset the side effects of scale effects, which makes the overall economic benefits negative [45].

Environmental protection can also promote the development of international trade. Resources and environment are the basis for economic development. Petroleum, minerals, etc. can be directly exported as resources. For developing countries, this accounts for a considerable proportion of their foreign trade. The implementation of environmental regulations in various countries can force both sides of the trade to improve production technology, innovate production processes, and use environmentally friendly and green manufacturing methods, thereby enhancing their own competitiveness. This provides incentives for participants in international trade.

Moreover, the implementation of environmental measures can popularize more knowledge of green consumption for consumers, allow consumers to form the concept of purchasing environmentally friendly products, and form a market orientation. This market orientation will guide the emergence of more environmental protection companies and promote the further development of the environmental protection industry. This also broke the traditional pattern of international trade and provided new growth points for the development of international trade [43].

Summary

In this chapter, many papers have shown that the deterioration of the global environment is inseparable from the development of international trade. In the process of globalization, ecological crises such as waste of resources, environmental pollution, and species invasion have also spread globally. How to maintain the balance of the ecological environment in the process of economic globalization is currently the focus of attention of the international community. Many countries are pulling policies to do green research. This chapter studies the concept of sustainable development as a basis for analyzing ecology and green behaviors, then learns correlation between the development of foreign trade and the state of environment. It analyzes reports and researches the theory of Environmental Kuznets Curve and analyzes research reports on economic and environmental issues in many countries. Theoretical approach method as a research method mainly done in this chapter. In the end, the chapter gets conclusions and put forward an idea, that is, under the background of environmental problems occupying a focus of worldwide attention, green development is the trend of international trade, and multinational companies, as important actors on the world stage, are playing an increasingly necessary role in environmental issues with their advantages.

2 CASE ANALYSIS OF LI-NING COMPANY

Li Ning Company is a professional sports brand company founded in 1990 by Mr. Li Ning, the "Prince of Gymnastics" in China. After 30 years of continuous development and exploration, in addition to the core brand Li Ning, Li Ning also owns the LOTTO brand, the AIGLE brand, and the Z-DO brand. Li Ning Company is China's first sporting goods company with independent R&D and design capabilities. Its first design and development center was established in 1998 in Guangdong, China. On June 28, 2004, Li Ning Company was officially listed on the Hong Kong Main Board. Li Ning insists on investing funds in research and development and building core product competitiveness through hard core technology. Li Ning Company focuses on the development of five core sports categories, including basketball, running, training, sports life, and badminton, in an attempt to build the Li Ning brand into the world's leading sporting goods brand. Relying on advanced technology and reliable word-of-mouth, Li Ning has consumers all over the world. At present, with its years of research and development accumulation, Li-Ning Company already possesses a variety of core technologies such as Li-Ning bow and Li-Ning arc, and products equipped with its core technologies are also popular among consumers.

Li Ning Company is committed to environmental protection while developing trade. As a leading company in sports goods in China, in 2009, Li Ning began to formally reflect the content of environment and sustainable development in its corporate annual report, and continued to pay attention to and improve the management of the supply chain in order to achieve the sustainable development of supply chain management. In 2011, Li Ning joined ZDHC and committed to zero discharge of hazardous chemicals. In 2013, Li Ning Company proposed in its corporate social responsibility report to increase the sustainable management of its supply chain and product safety and sustainable management, and began to formally use the term "sustainable management". From 2019 to 2020, Li Ning took environmental protection as the main marketing idea, and carried out many unique marketing activities in China, which attracted the attention

of many consumers. For example, in the "turning waste into treasure" campaign at the Shanghai Li-Ning brand store, customers can personally participate and experience the magical process of turning waste plastic bottles into clothing. This activity of using recycled materials such as living plastics to make clothes, is also called from "zero" to "one" (the pronunciation of clothing and pronunciation of one is the same in Chinese) is the environmentally friendly marketing of this nearly 30-year-old Chinese sports brand, and it also promotes the development of the charity and the society.

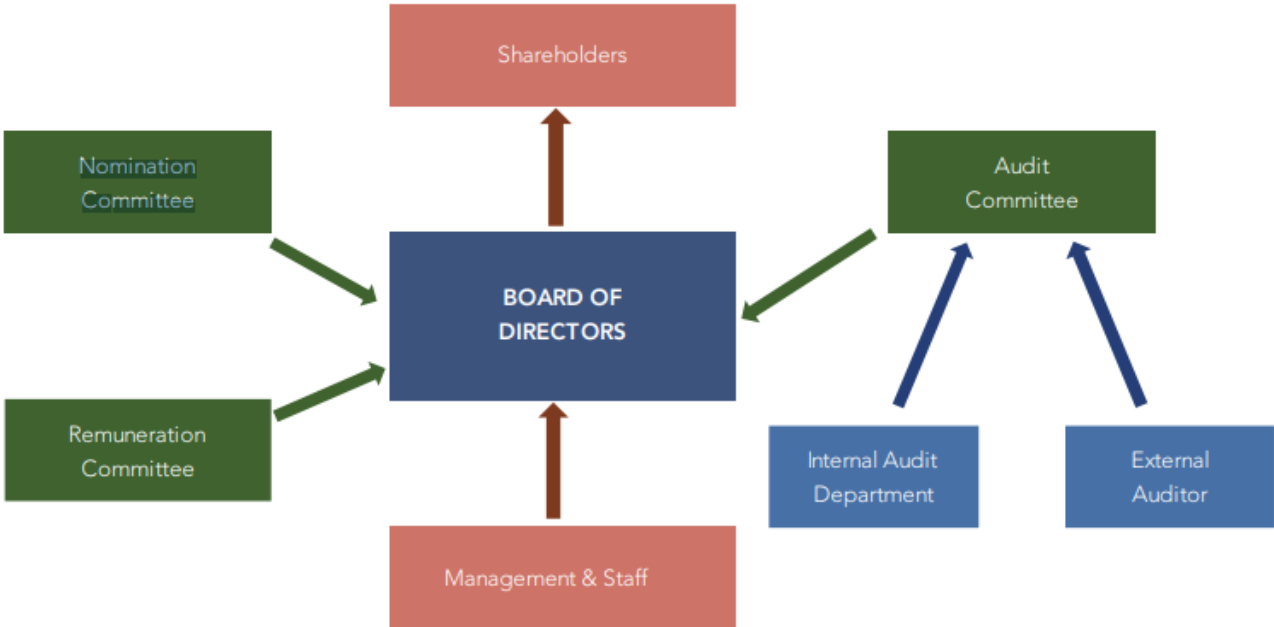
2.1 Organizational and economic characteristics of Li-Ning Company

In 1990, Li Ning Company started in Sanshui, Guangdong. At the beginning of its establishment, it cooperated with the Chinese Olympic Committee to promote the development of China's sports through the sporting goods business and spared no effort to sponsor various events. In 1995, Li Ning Company became a leader in China's sporting goods industry. In 2005, Li Ning Company continued to maintain its leading position in the industry, with sales hitting a record high, sprinting towards the goal of a world-class brand. On December 30, 2008, in the "World Brand Value Laboratory Annual Awards" held by World Brand Value Laboratory, which is world's authoritative brand value research institution, Li Ning was honored for its good brand impression and brand vitality in the "World Brand Value Laboratory Annual Awards" selection activity, catches "China's Most Competitive Brand List" award and has won widespread praise from consumers from all over the world.

The specialized nature of products is the basis for competition in the sporting goods industry. Li Ning Company regards product research and development as a constant record-setting and record-breaking schedule. As early as 1998, the company established the first apparel and footwear product design and development center of a local company and took the lead in becoming a self-developed Chinese sporting goods company. In 2004, Li Ning cooperated with the Department of Human Exercise Science of the Chinese University of Hong Kong. The mechanical characteristics of the sports

shoes produced by the company are tested in sports biomechanics, the foot database of professional athletes is established, and the data collection and analysis of professional sports characteristics are carried out to further improve the professionalism and comfort of the products. In the near future, Li Ning will strive to become a world-class brand and provide professional sports products to athletes and sports enthusiasts all over the world. Li Ning has the largest sporting goods distribution network in China. At the same time, Li Ning's international network is constantly expanding, and it has now entered 23 countries and regions.

The corporate governance structure of the company is as follows at the picture 2.1.



Picture 2.1 – Corporate governance structure of Li Ning Company

In Li Ning Company, it mainly has four committees, nomination committee, remuneration committee, audit committee and human resource committee which includes management and staff department. For audit committee, it has internal audit and external audit department. They are all responsible for shareholders. This is the standard building block board directions of an international company.

For communication with stakeholders and key issues identification, Li Ning’s implementation of the sustainable development cannot be separated from them.

Based on the features of the industry and its own development strategies, the Group has identified seven major stakeholders groups that are closely related to its development, including government and regulatory authorities, shareholders and investors, employees, distributors and suppliers, media, consumers, communities and general public. The Group maintained good communication with stakeholders through various communication channels, and responded to the key ESG issues concerned by stakeholders from various aspects such as enterprise operation and development, so as to demonstrate the level of ESG management of the Group and carry out ESG related work in a more orderly and efficient manner (Picture 2.2).



Picture 2.2 – Stakeholders of Li Ning Company

Government and regulatory authorities, they communicate from policy guidelines; regulatory document; industry meeting; on-site inspection; off-site regulation. Their tasks are concerned about energy saving and emission reduction; corporate governance;

compliance operation; implementation of policy. Their response is about implement regulatory policy; persist in paying tax in accordance with law; accept supervision and assessment; carry out green operations and improve corporate governance system.

For shareholders and investors, they communicate from general meeting; road show; results announcement; information disclosure. Their tasks are concerned about operation strategy; profitability; transparency of information disclosure. Their response is about strengthen ESG management; maintain brand value; regularly publish results announcement and promote risk and internal control management.

For employees, they communicate from trade union; staff representatives meeting; intranet mailbox and corporate activity. Their tasks are concerned about employee remuneration and benefits; community charity; development and training; safety and protection. Their response is about bring the role of trade union into play; enrich employees' life; care about health of employees; establish a learning platform; protect employees' rights and interests.

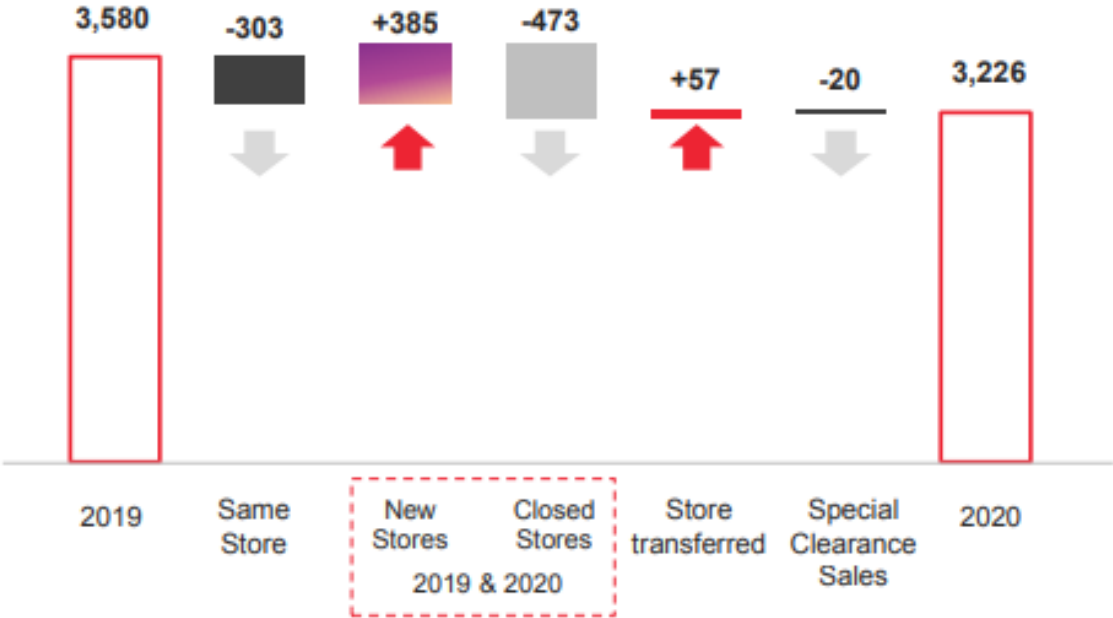
For distributors and suppliers, they communicate from regular communication meeting; daily communication and visits; cooperation agreement; strategic negotiation. Their tasks are concerned about fair cooperation; integrity and compliance; mutual development. Their response is about formulate a transparent and fair procurement system; enhance environmental and social risk awareness; establish a good relationship in business cooperation.

For media, its channels are from press release; media platform and site visit. Their tasks are concerned about corporate influence; transparency of information disclosure; ability in public relations. Their response is about regularly organize the open day for media; real-time news release; timely and objective information disclosure.

Consumers can connect with Li Ning from customer service hotline; satisfaction survey; marketing activity; and official website. They care about product quality; after-sales service; privacy protection. They can help establish and improve the quality control and management system; improve service quality; protect consumers' rights and interests and safeguard customer information security.

And Li Ning is also supervised by community and general public by charity activity; volunteer action and community activity. Benevolent and charitable activities; Community development; Community relations are their affairs. They are response to regularly conduct volunteer activities; increase external donations and promote professional sports knowledge.

From the point of view of business mode, Li Ning Company mainly adopts outsourcing production and franchised distributor model. It has established a huge supply chain management system and distribution and retail network in China. Recent years, temporary closures due to Covid-19 as well as closure of sub-standard productivity stores is as follows (Picture 2.3).



Picture 2.3 – Number of stores of Li Ning brand in China

As of 2020, the total number of Li Ning sales points in China (excluding Li Ning YOUNG) is 5,973. The number of stores is 3226, which means less points of Li Ning’s offline sales, but higher quality of their presenting exhibitions.

In the international market, the company continues to expand its business in Southeast Asia, India, Central Asia, North America and Europe. Its internal working process is as follows: the head office and distributors in various places orders in

advance, and the manufacturer sends the ordered goods to the headquarters of each sales area, and then sends them to the distributors in each city according to the order, the distributors will take the goods. Distributors will allocate the goods to sales outlets. The main retail operation is as picture 2.4 shows.

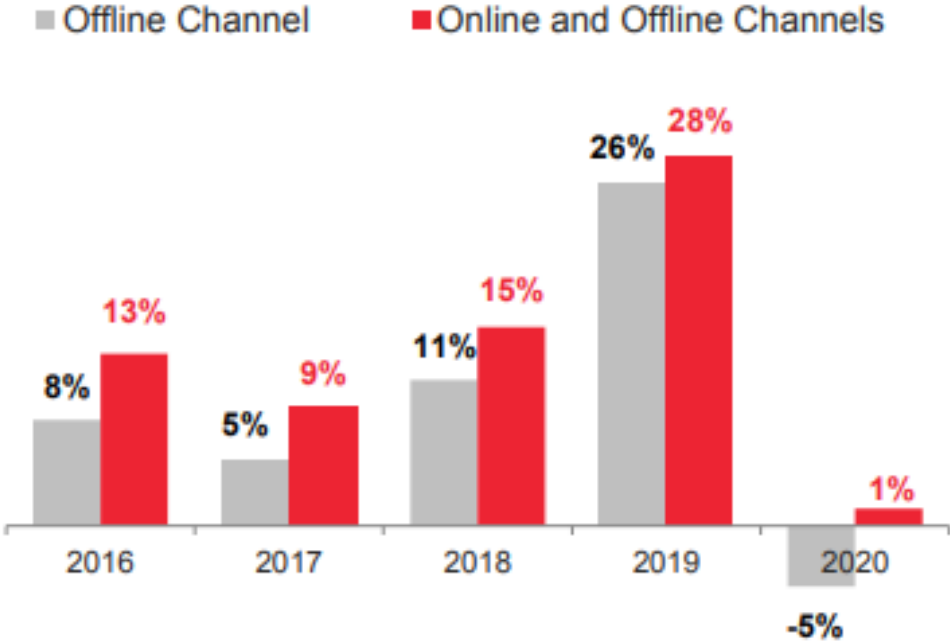


Picture 2.4 – Main retail operation of Li Ning Company

From the picture, Li Ning’s product planning is based on its new product sell- out rate. New product performance contributes to total sales. Sales in retail store is the mainly income of Li Ning Company, and after 12 months, the goods will be put in inventory clearance. Cash recovery includes cash flow which mainly comes from its operating activities, net cash, trade receivables and cash conversion cycle. These all come up with retail operation closed loop of Li Ning’s annual calculate.

Li Ning's business philosophy is "Anything is possible", which is also its slogan. Li Ning Company regards product research and development as a constant record-setting and record-breaking schedule. In practice and exploration, Li Ning Company has

formed a set of strategic planning mode and management system suitable for itself, so that the company's organization and operation are smooth and unimpeded, and the strategy is executed decisively and quickly. Li Ning Company is an enterprise focusing on traditional channel sales. When constructing online marketing channels, Li Ning's strategy is mainly to integrate existing channel resources and to incorporate existing online channel resources in the form of authorization in the line with opening its own online stores on major platforms. Then Li Ning opened its own China International Official Mall in the form of a self-built platform. In terms of channel coordination, Li Ning's main strategy is to distinguish between the types of online and offline product sales and the price of the same product. The promotion of online channels is mainly through advertising on some comprehensive portal websites and search engine marketing. At present, Li Ning Company is establishing an information system starting from ERP nationwide, fully integrating product design, supply chain, channels, retail and other resources, developing e-commerce, and further improving operational efficiency and brand image (Picture 2.5).



Picture 2.5 – Online and offline channels of Li Ning Company

In recent years, obviously Li Ning keeps developing e-commerce. In 2020, COVID-19 impacted store opening/closing rhythm and negatively impacted sell-through momentum.

As early as 2006, Li Ning Company has ranked fifth in the world among the global comprehensive sporting goods suppliers.

In 2020, Li Ning's market value reached 159,586 billion Hong Kong dollars. Its revenue growth mainly comes from :

- the improvement of integrated marketing capabilities;
- the continuous growth of store efficiency at all levels of the market;
- the continuous expansion of sales channel coverage;
- more tailored market segments and consumer preferences Product development and design;
- continuous improvement of supply chain efficiency from integrated product planning and design to logistics efficiency improvement.

At this stage, the global sportswear industry has several characteristics: technological improvement largely determines the leading position of various brand products, and technological innovation has become the first driving force for the production and development of the clothing industry. In the clothing industry, the worst-hit area of pollution and waste of resources, environmental protection has become a common practice. Although the investment of Chinese apparel companies in product ecology and environmental protection is just in its infancy, no one will underestimate the importance of environmental protection. After all, for a manufacturing country like China, product exports are related to the development of countless companies, and in the export link among them, the role of environmental protection is undoubtedly the most important.

Enhancing technological innovation and taking the road of environmental protection not only conforms to the development trend of society, but also helps to enter the international market. In the annual reports of Li Ning in recent years, we can find that

environmental protection has become an indispensable part of Li Ning’s development strategy. With the goal of going international, Li Ning has taken a number of measures to take the path of environmental protection.

2.2 Key economic indicators of Li Ning Company

With the development of economic globalization, after experiencing a trough in 2012-2013, Li Ning Company has undertaken to change the Chinese brand structure of "a large manufacturing country and a small brand country". Li Ning, as a leader in China's sporting goods industry, in this environment where opportunities and challenges coexist, not only must maintain its own advantages and continue to develop as usual, but also actively seek long-term development in the international market. Therefore, the international development of Li Ning Company has become an urgent issue.

Li Ning's overall development in recent years

Li Ning Company experienced a lot since 2012. In recent years, its revenue has a quick and stable increasing. In this section, I will consider the main economic indicators of the company over the past 3 years. Data for analysis is taken from Li Ning Company annual report.

Table 2.1 – Key economic indicators of the company for 2018-2020

indicator	units	2018		2019		2020	
			% year-on-year		% year-on-year		% year-on-year
operating income	billion yuan	10.511	18	13.870	32	14.457	4,2
net profit	billion yuan	0.715		1.499	102		
net profit margin	%	5,8		6,8		7,09	
net cash	billion yuan	1.672	44	3.503	110		

In 2018, Li Ning's annual performance report showed that during the reporting period, the company's operating income reached 10.511 billion yuan, an increase of 18% year-on-year. The company achieved an attributive net profit of 715 million yuan, and the net profit margin increased from 5.8% to 6.8%. In terms of cash flow, the company's net cash generated from operating activities during the reporting period was 1.672 billion yuan, a year-on-year increase of 44%.

In March 2019, the announcement issued by Li Ning Company showed that in 2019, Li Ning achieved operating income of 13.870 billion yuan, a year-on-year increase of 32%; realized net profit of 1.499 billion yuan, a year-on-year increase of 110%; gross profit margin expanded by 1 percentage point to 49.1%; Cash flow increased by 110% to 3.503 billion yuan.

In 2020, Li Ning's revenue reached RMB 14.457 billion, an increase of 4.2% over the same period in 2019. Gross profit increased by 4.2% from RMB 6.805 billion in 2019 to RMB 7.09 billion. The group's overall gross profit margin was 49.1%, which was the same as the previous year.

Table 2.2 – Revenue breakdown by brand and product category for 2018-2020

Revenue,	2018		2019		2020	
	thousand yuan	%	thousand yuan	%	thousand yuan	%
Footwear	4,601,262		6,085,402		6,338,157	
Apparel	5,316,033		7,109,763		7,365,173	
Equipment and accessories	593,603		674,465		753,641	
Total	10,510,898		13,869,630		14,456,971	

From the point of view of the product sales announced on the official website of Li Ning in 2018, the company's sports and leisure products, basketball-related products, and running-related products accounted for 25% of the sales, while training-related products and non-core products accounted for 22% and 3%. Among them, with the exception of non-core product sales that fell 64%, the sales of other sub-products all

showed an upward trend. Among them, sports and leisure products grew the fastest, with a growth rate of 42%.

In terms of product categories, clothing accounted for 51.2% to 7.11 billion yuan in total revenue, footwear accounted for 43.9% to 6.085 billion yuan in total revenue, and equipment and accessories accounted for 4.9% to 674 million yuan in total revenue. In terms of channels, 98.1% of Li Ning's revenue comes from the Chinese market, and overseas revenue accounts for 1.9%. Among them, revenue from franchised dealers accounted for 49.5%, direct sales accounted for 26.1%, and e-commerce channel sales accounted for 22.5%. As of the end of 2019, the number of Li-Ning sales points in China (excluding Li-Ning YOUNG) totaled 6,449, a net decrease of 115 from the end of the previous quarter. Due to a net decrease of 214 in retail business, a net increase of 319 in wholesale business.

According to Li Ning's 2020 annual report, footwear revenue accounted for 43.8% of total revenue to 6.338 billion yuan, clothing revenue accounted for 51.0% of total revenue to 7.365 billion yuan, and equipment and accessories revenue accounted for 5.2% to 754 million yuan.

Table 2.3 – Proportion of retail methods (2020)

Region as a percentage of revenue		2018	2019	2020
PRC market				
	Sales to franchised distributors	46.7	49.5	47.9
	Sales from direct operation	29.8	26.1	22.6
	Sales from e-commerce channel	21.1	22.5	28.0
International market		2.4	1.9	1.5
Total		100.0	100.0	100.0

In terms of different channels, 98.5% of Li Ning's 2020 revenue will come from the Chinese market, and overseas revenue will account for 1.5%. In 2020, Li Ning's online e-commerce channels are significantly better than offline. Among them, revenue from franchised dealers accounted for 47.9%, and direct sales accounted for 22.6%. Its e-

commerce channel sales revenue for the year increased by 29.9% year-on-year, and its share increased from 22.5% in 2019 to 28%.

Li Ning Company stated that it will continue to develop the strategy of "single brand, multi-category, multi-channel", centering on making Li Ning' core of an international first-line brand, focusing on the development of the brand, and tapping more market segments to explore development space.

Analysis of solvency indicators

The solvency index can reflect the solvency level of an enterprise, because the company's debt is divided into long-term debt and short-term debt, so the analysis of corporate solvency is also divided into long-term solvency analysis and short-term debt. There are two types of solvency analysis. Long-term solvency can be reflected b equity multiplier. The solvency can be measured by two indicators: current ratio and quick ratio.

Table 2.4 – 2016-2020 Li Ning's assets and liabilities, thousand yuan

Indicator	2020	2019	2018	2017	2016
Assets	14,593,865	12,547,474	8,727,305	7,321,349	6,780,494
Liabilities	9,578,808	7,830,854	5,949,834	5,193,539	4,106,579
Capital and reserves attributable to equity holders (equity multiplier)	8,686,863	7,121,639	5,817,040	5,071,047	3,994,599

Through the table-we can get the overall growth trend of Li Ning's assets from 2016 to 2020. In 2020, Li Ning's total assets have increased by 215% over 2016, liabilities have increased by 23.3%, and shareholders' equity has also shown a growth state. It can be seen that Li Ning has been in a stage of rapid development in the past five years.

Table 2.5 – 2016-2020 Li Ning Company Solvency Index

Indicator	2020	2019	2018	2017	2016
Current ratio	1.95	1.81	2.30	2.40	1.74
Quick ratio	1.91	1.66	2.14	2.44	1.54
Equity Multiplier	1.68	1.76	1.50	1.44	1.70

Ps: Current ratio = current assets/ current liabilities

Current ratio of 2020= $9,776,556/5,015,057 \approx 1.95$

Current ratio of 2019= $8,539,316/4,716,620 \approx 1.81$

Current ratio of 2018= $6,386,254/2,777,471 \approx 2.30$

Current ratio of 2017= $5,110,382/2,127,810 \approx 2.40$

Current ratio of 2016= $4,650,440/2,673,915 \approx 1.74$

Quick ratio= quick assets /current liabilities

Quick ratio 2020= $9,578,808/ 5,015,057 \approx 1.91$

Quick ratio 2019= $7,830,854/ 4,716,620 \approx 1.66$

Quick ratio 2018= $5,949,834/2,777,471 \approx 2.14$

Quick ratio 2017= $5,193,539/ 2,127,810 \approx 2.44$

Quick ratio 2016= $4,106,579/2,673,915 \approx 1.54$

Equity Multiplier= assets/ Capital and reserves attributable to equity holders

Equity Multiplier 2020= $14,593,865/ 8,686,863 \approx 1.68$

Equity Multiplier 2019= $12,547,474/7,121,639 \approx 1.76$

Equity Multiplier 2018= $8,727,305/5,817,040 \approx 1.50$

Equity Multiplier 2017= $7,321,349/ 5,071,047 \approx 1.44$

Equity Multiplier 2016= $6,780,494/3,994,599 \approx 1.70$

The current ratio and quick ratio are important indicators that reflect Li Ning's short-term debt solvency. The current ratio reflects how much current assets can be used as a guarantee for repaying current liabilities; the quick ratio is the ability of a company to quickly realize its current assets anyway. From 2016 to 2020, Li Ning's current ratio and quick ratio are relatively stable, showing an overall upward trend, with strong short-term debt solvency and rapid liquidity capabilities, reflecting the healthy development of the company.

The equity multiplier reflects the company's long-term debt solvency. The equity multiplier of Li Ning Company from 2016 to 2020 shows a downward trend, indicating that the debt level of the company is decreasing, and the degree of protection of the rights and interests of creditors is increasing. Li Ning’s annual report shows that because Li Ning changed its sales focus in 2017, its design and advertising are more inclined to the young market, such as Li Ning’s “Wade’s Way” series of products and “White Cranes in the Cloud” which are reflecting ancient Chinese characteristics launched by Li Ning to the young market have boosted Li Ning's sales volume during the year.

Analysis of profitability indicators

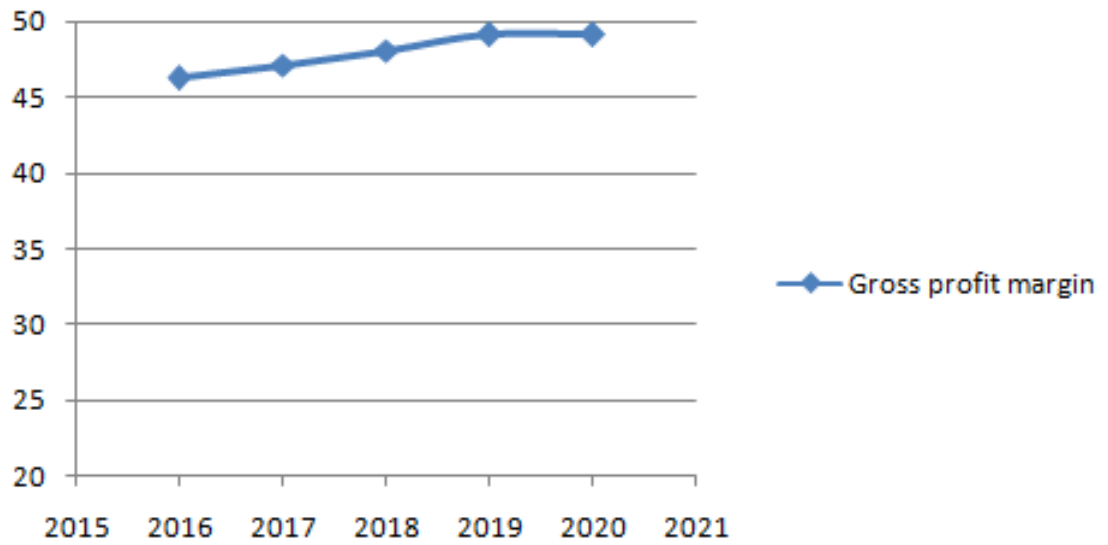
Profitability refers to the company's ability to obtain profits, or the ability to increase capital and capital. It is usually reflected in the amount of corporate earnings and the level of net asset interest rates.

Table 2.6 – Profitability indicators

Indicator	2020	2019	2018	2017	2016
Gross profit margin	49.1%	49.1%	48.1%	47.1%	46.2%
Operating profit margin	11.7%	10.8%	6.8%	5.8%	8.0%

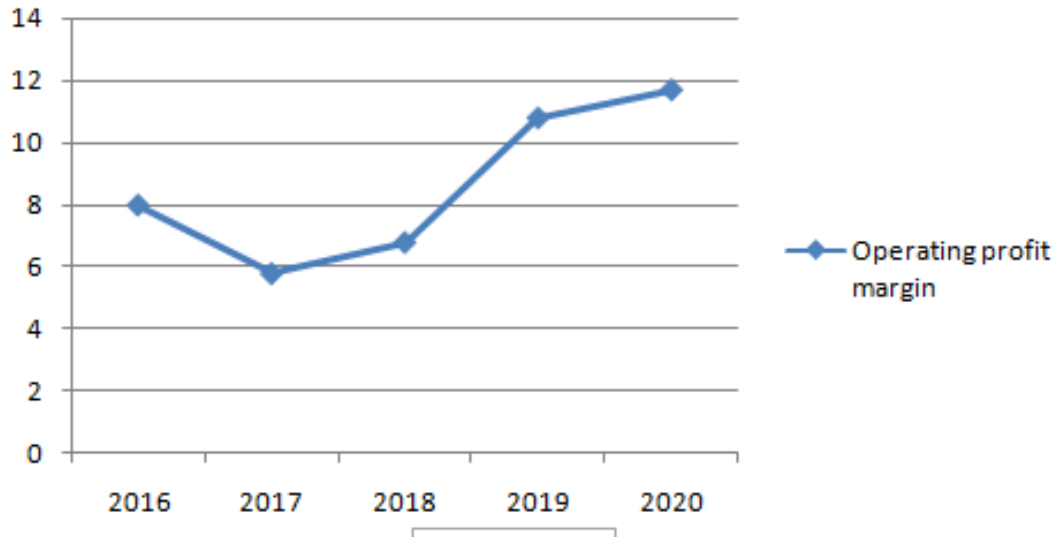
In recent five years, Li Ning’s gross profit margin is stable increasing. Its operating profit margin also has a good trend (Picture 2.6, 2.7).

Gross profit margin



Picture 2.6 – Gross profit margin from 2016-2020

Operating profit margin



Picture 2.7 – Operating profit margin from 2016-2020

Ps: Operating profit margin=net margin/ turnover

It can be seen from the chart that Li Ning's gross profit margin has always remained at a relatively high level in 2016-2020. To a certain extent, the company's gross profit margin symbolizes the profitability of the company's business activities. Compared with other companies, it can be concluded that the overall gross profit margin of the sporting goods industry at this stage is higher.

Net sales margin is one of the representative indicators of corporate profitability. In 2017, Li Ning's net profit margin was inversely proportional to its gross profit margin. According to the company's annual report, Li Ning adjusted its sales direction in 2017 and increased its investment in young markets. The net profit margin of Li Ning Company's sales is generally on the rise. This stage is also the stage of rising Li Ning's development after Li Ning Company changed its chairman in 2012.

The most noteworthy is despite the pandemic in 2020, there is an increase in profits and margins of Li Ning Company.

2.3 Environmental analysis of Li-Ning's business

In Li Ning Company's 2020 annual report, Li Ning adopted ESG (Environmental, Social, and Corporate Governance) strategy, in some aspects such as environmental protection, care for employees, supply chain management, product responsibility, anti-corruption and community investment that are in line with the Group's development strategies to achieve sustainable development.

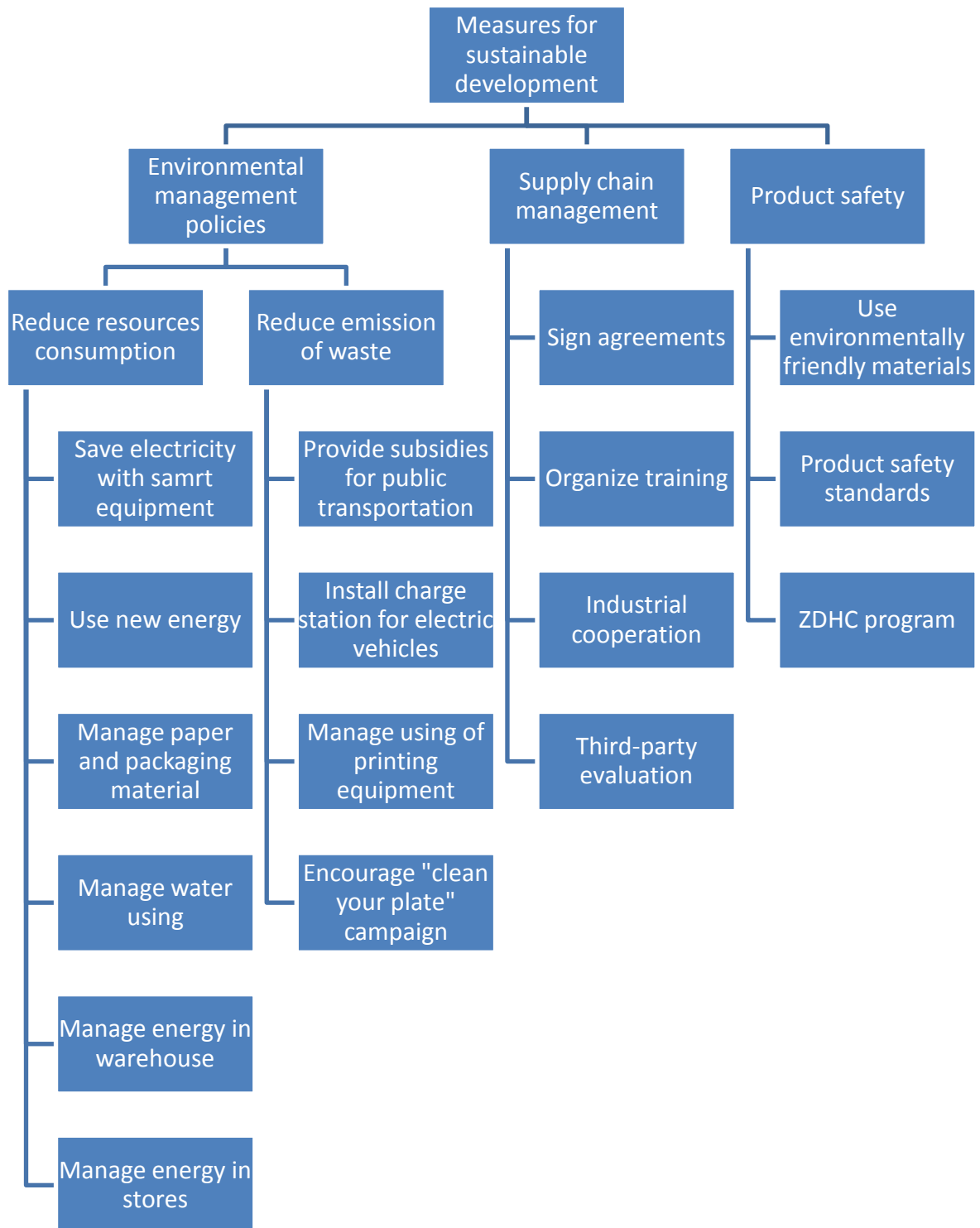
The Group has established the ESG management structure to ensure the highly efficient and orderly implementation of ESG work (Picture 2.7).



Picture 2.7 – ESG Management Structure of Li Ning Company

The Group incorporated the ESG philosophy into its daily operation by actively implementing energy conservation and emissions reduction measures, paying close attention to the impact of climate change and building the value chain of sustainable development. It also placed strong emphasis on protecting the rights and health of employees, realizing mutual development with employees, safeguarding customer rights and interests, protecting customer privacy, maintaining clean operation and enhancing the public participation. The Group continued to promote the sustainable development of itself and the society.

In this part, I mainly use environmental management policies, supply chain management and product safety measures to study how Li Ning enterprises promote the implementation of sustainable development strategies and deal with environmental problems through procedures of trade (Picture 2.8).



Picture 2.8 – Li Ning's sustainable development strategy and measures

Environmental management policies

Li Ning's environmental management measures mainly include two aspects: reducing energy consumption and reducing waste emissions. In order to implement energy saving and emission reduction goals, Li Ning has formulated and optimized various internal management systems.

Table 2.7 – Energy consumption and waste emission relevant documents

Relevant documents
Li Ning Company Energy Saving Arrangements
Li Ning Company Energy (Resources) Saving Management Standards
Li Ning Company Energy Saving Measures
Li Ning Company Dangerous Goods Management System

In respect of environmental protection:

Comply with the laws and regulations regarding environmental protection of the places where the Company operates; actively and consistently adhere to the development philosophy of “lucid waters and lush mountains are invaluable assets”.

Implement energy conservation and emission reduction measures, rationally use clean energy, improve energy use efficiency, set energy conservation and emission reduction targets, and actively respond to climate change.

Develop the concept of green office, enhance employees’ awareness of environmental protection, promote paperless office, implement the principle of green procurement, and give priority to the purchase of green and environmental friendly equipment.

Adopt advanced technology, research and develop environmental-friendly recycled fabrics, integrate environmental protection into the product concepts and promote sustainable development.

In terms of reducing waste emissions, Li Ning Company encourages employees to take public transportation, provides convenient commuter shuttle services for employees, and provides employees with transportation subsidies to reduce the use of

private cars, thereby reducing vehicle exhaust emissions and reducing employees' carbon emission during their commuting time.

In addition, Li Ning has also installed six electric vehicle charging points in the headquarters office park to provide convenience for employees to use electric vehicles and encourage environmentally friendly electric vehicle travel.

In terms of office work, Li Ning Company strictly manages printing equipment, saves printing paper, collects hazardous waste in a centralized manner, and cooperates with joint-venture professional companies to clean, transport, and recycle office waste. Li Ning encourages online work, supports the use of remote meeting platforms, and thus reduces paper consumption. When purchasing office appliances, Li Ning supports the choice of environmentally friendly reusable materials.

In daily life, Li Ning Company also encourages employees to carry out "Clean Your Plate Campaign" during meals and office facilities to reduce harmless waste.

In terms of reducing energy consumption, Li Ning Company mainly advocates effective use of resources through reasonable cost and technical support measures. Replacing old facilities in a timely manner and formulating energy-saving plans in accordance with actual plans can improve employees' work efficiency and energy-saving awareness. The main measures include: using smart facilities to save electricity, using clean new energy, strengthening the management of paper and packaging materials, strengthening the management of water conservation, and building energy-saving management teams for warehouses and stores. Specifically, Li Ning installed energy-saving facilities with light control and temperature control functions in the office park of the headquarters to achieve the goal of reducing energy waste during non-office hours. With the support of professional companies, Li-Ning uses solar panels to meet more than 30% of electricity demand, greatly reducing the proportion of non-clean energy used for power generation.

In the office park, Li Ning realized the water cycle of the office area and the landscape area, ensuring water quality and reducing water consumption. In offices, warehouses, stores and other places, Li Ning has set up a dedicated management team

to monitor and promote energy conservation and emission reduction, and analyze monthly energy consumption to tap energy conservation potential.

The development of science and technology is the core of energy saving and emission reduction. As the first brand to respond to the consumption of low-carbon clothing, Li Ning has launched a full range of environmentally-friendly clothing through the use of ECO-CIRCLE fabrics. After this fabric is recycled and sent to the factory for chemical decomposition, it can be turned into a new ECO-CIRCLE fabric. When this kind of clothing is old and dirty, the wearer can return it to the designated recycling location, crush it again, and make it into clothing. The cycle of ECO-CIRCLE has greatly continued the sustainable value of sustainable fabrics and realized the practical value of "clothing rings" and "low-carbon clothing".

Supply chain management

In terms of the sustainable development of the supply chain, the measures taken by Li Ning Company can be divided into signing agreements, organizing training, industrial cooperation and third-party evaluation.

In 2019, Li Ning has formulated and issued "Manual for Corporate Social Responsibility Management of Suppliers of Li Ning Company Limited", which integrated the corporate social responsibility management into the introduction, evaluation, continuous improvement and termination process of suppliers, and gave explicit details of the working procedures, assessment standards and target requirements of the supply chain management. As at the end of 2020, Li Ning Company currently has a total of 319 suppliers.

In the past ten years, Li Ning Company has continued to publish relevant supply chain sustainability management documents, to standardize ESG management system and process in supply chain.

Below are the goals in respect of supply chain management:

Strictly implement supplier introduction, assessment and termination process, strengthen supplier assessment requirements, and urge supply chain to improve ESG performance.

Continuously improve the supplier ESG management system with the benchmark of international standards and best industrial practices, standardize the supply chain ESG management system and process, and build a sustainable value chain with concerted efforts.

Improve the environmental protection concept of suppliers, continue to carry out environmental compliance and carbon emission management in the supply chain, encourage suppliers to strengthen the implementation of energy conservation and emission reduction measures, and urge suppliers to carry out self-examination on the environmental performance.

Evaluate suppliers' chemical risk comprehensively, supervise suppliers' full-process management on chemicals, and urge suppliers to improve their chemical management level.

Enhance social responsibility management of supply chain, urge suppliers to protect employees' rights and interests, prohibit child and forced labour, and promote suppliers to develop and build safe, inclusive and mutually respectful workplaces.

Actively promote industry collaboration, strengthen industry exchanges, participate in the formulation of industry standards, promote the zero-emission of hazardous chemicals in the production process, and jointly enhance the competitiveness and discourse power of the industry in the global market.

Supply chain management relevant documents reflected in the table 2.8.

Table 2.8 – Supply chain management relevant documents

Relevant documents
Manufacturing Restricted Substances List and Policy of Li Ning Company
Tools for Quarterly Review of Environmental Evaluation of Suppliers of Li Ning
Code of Conduct Regarding Social Responsibilities of Suppliers of Li Ning
Manual for Social Responsibility Management of Suppliers of Li Ning
Social Responsibility Implementation Guideline of Li Ning’s Supplier

Li Ning Company refers to the Supply-Chain Operations Reference model (SCOR System) to establish evaluation indicators for different types of suppliers. Li Ning also implements quarterly evaluation and assessment of environmental performance self-examination and self-report for all suppliers. They provide environmental impacts, energy declarations, greenhouse gas inventories, etc., and urge suppliers to strengthen self-environmental performance management and continuous improvement.

Li Ning Company actively organizes training to improve the supplier's practical operation level and management ability. For example, in 2010, Li Ning officially launched the "10-year supplier factory environment, health, safety, and employee relationship management" project. In 2013, a benchmarking training on the use of on-site chemicals was held for suppliers. In 2014, training on the management of restricted substances in production processes was organized.

In recent years, Li Ning Company has also actively participated in industrial cooperation with suppliers. In 2020, Li Ning Company, as a member of the expert committee, assisted the Social Responsibility Office of China National Textile and Apparel Council in compiling the “Circular Fashion: Prospects of China's New Textile Economy” to jointly explore the current situation and opportunities of industrial circular transformation, circular economy and sustainable fashion. Li Ning actively participated in China National Textile and Apparel Council Life Cycle Assessment (CNTAC-LCA), Zero Discharge of Hazardous Chemicals (ZDHC) Program, Climate Stewardship 2030 in Fashion and other projects.

Li Ning cooperates with a number of external professional testing and consulting organizations, such as TUV Rheinland, SGS, UL, Intertek, BV, ELEVATE, BSI, etc., and uses third-party evaluation tools to conduct on-site audits and environmental performance audits of suppliers.

Product safety.

Li Ning Company strictly controls the quality and safety of products, and has formulated various clothing enterprise standards and quality control management systems that exceed national and industry standards, including physical and chemical properties, functional quality, appearance quality, auxiliary materials, accessories quality, various clothing and safety technical requirements for footwear products.

Product safety is the top priority of Li-Ning Company's development. Li-Ning Company realizes its sustainable development strategy by controlling product safety. As the sole Chinese brand, Li Ning becomes one of the six founding brands of Zero Discharge of Hazardous Chemicals (ZDHC) Program. In 2020, Li Ning Company was rewarded the "ZDHC Roadmap 2020 Awards" by ZDHC.

Li Ning laboratory closely cooperates with the company's R&D, development and production quality control for testing, analysis, and inspection. Li Ning formulates its product safety standards and uses environmentally friendly materials in its products, such as bamboo charcoal fiber, corn fiber, coffee carbon, organic cotton, fluorine-free waterproof fabric and recyclable fiber, etc., which are used in clothing design after passing laboratory tests. In the production process, Li Ning requires its suppliers to actually produce products that meet the requirements of the Li Ning brand, provide a test report of each batch of materials, and the laboratory conducts tests and comparisons one by one, and then puts them into production after all verifications.

The laboratory also drafts and revises corporate standards for the company and provides services for national and industry standards. In product examination and recall, Li Ning Company formulated the management measures to further standardize the recall management of defective products to eliminate the danger caused by defective

products to the health and safety of consumers, thereby protecting the rights and interests of consumers.

Product safety relevant documents reflected in the table 2.9.

Table 2.9 – Product safety relevant documents

Relevant documents
Quality Management System Assessment Table for Clothing Suppliers
Supervision and Assessment Table for Operation of Quality Management System of Clothing Suppliers
Quality Management and Control Procedures for Clothing R&D Phase
Quality Management and Control Requirements for Development and Production of Clothing
Management Measures for Li Ning Product Marking and Labeling
Procedures and Standards on Recall of Li Ning’s Defective Goods
Service Commitment (Repair, Replacement and Return) of Product Quality
Li Ning Company’s Defective Product Recall Management Regulations

Below are the goals in respect of product responsibility:

Strengthen management on advertising, labelling and intellectual property to enhance brand recognition, enhance brand awareness and protect brand reputation

Facilitate product innovation, maintain stable quality control, and provide high quality products to consumers

Safeguard the legitimate rights and interests of consumers, protect consumers’ privacy and information security, and improve customer complaint handling skills and after-sales service.

Li Ning and Adidas Group, Benetton Group SpA, C&A, Esprit, Gap Inc., G-Star Raw, New Balance Athletic Shoe Inc., PUMA SE and other brands promise to lead the reform of the apparel and footwear industries and achieve hazardous chemicals in 2020. The goal of zero emission is to ensure product safety in detergents, degreasing agents, refining agents, wetting agents, dyes, printing pastes and spinning oils, and strictly control that the chemical products in all links of production do not contain APEO formula. (Polyoxyethylene ether)

Fight against the COVID-19

Facing the sudden outbreak of COVID-19 at the beginning of 2021, Li Ning Company responded it by swiftly establishing a joint epidemic prevention and control team covering all subsidiaries in various regions.

At the same time, Li Ning Company in line with its own resource advantages, actively donated money and supplies to help and support the affected people and region.

During the time of epidemic outbreak, Li Ning Company strictly implemented the prevention and control requirements of local governments, formulated targeted and specific response measures, regularly cleaned and disinfected the surfaces of objects in the office, and provided sufficient hand sanitizers and alcohol cotton balls in the office areas.

Li Ning Company used the online office software to make daily health report, thus to effectively keep track of staff's movement and health conditions. It has established a mechanism for daily inspection and inquiry of employees' health conditions, collected epidemic prevention and control information from various platforms, subsidiaries and factories in a timely manner, urged those with abnormal physical conditions to seek medical advice immediately, and conducted follow-up inquiries on their conditions.

In late January 2020, after the epidemic outbreaks in Hubei Province the Group immediately donated RMB10 million through the China Charity Federation. In the middle of February, in line with COVID-19, Hubei suffered cold wave and heavy snow. Upon learning the difficulties, the Company donated cold proof supplies such as sleeved hoodies, wind coats, cotton coats, down jackets and warm shoes for medical staff and patients to keep warm. (Picture 2.9)



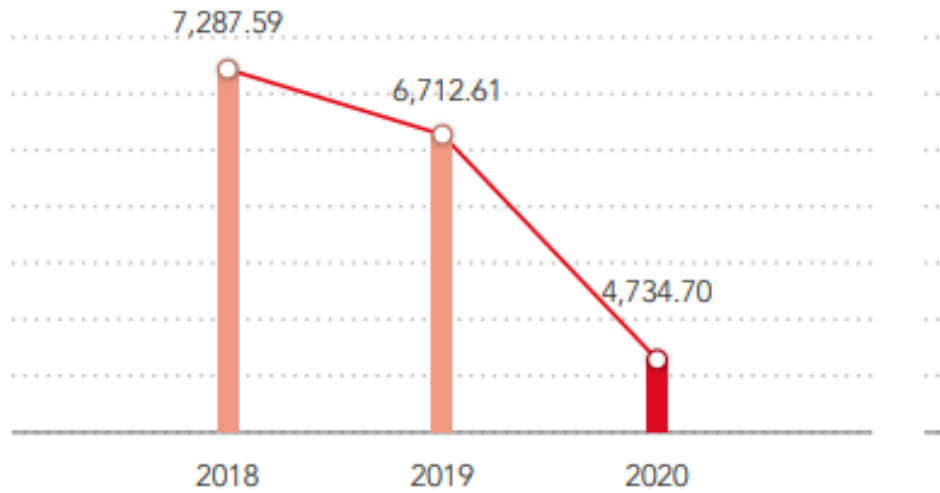
Picture 2.9 – Li Ning fights with COVID-19

Li Ning Company worked with the One Foundation to fight against the epidemic and actively supported One Foundation's initiative to help the teams maintain sufficient combat capacity and continue to fight the epidemic.

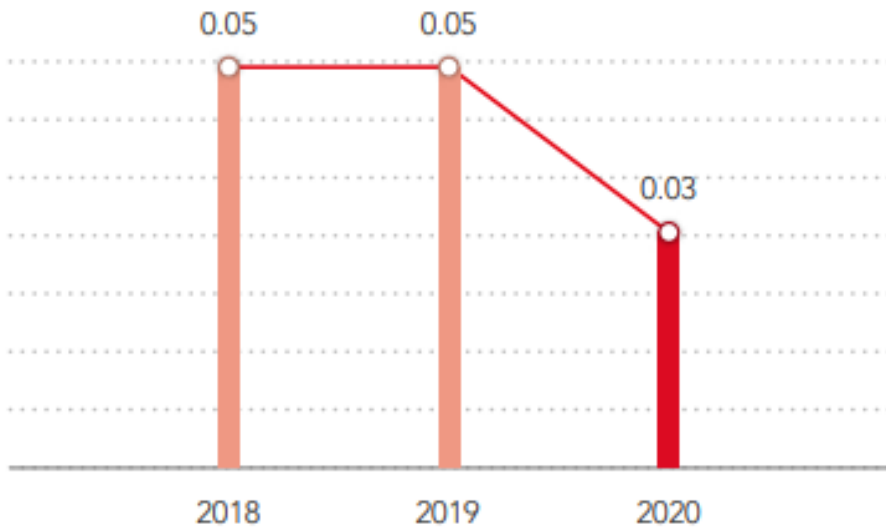
2020 Environmental Performance of Li-Ning Group

Year 2020, Li Ning has a great performance in sustainable foreign trade developing.

Due to the nature of the Group's operation, the major types of gas emissions are greenhouse gases as well as electricity and fuels converted from fossil fuels. (Picture 2.10, Picture 2.11)



Picture 2.10 – Total emission of greenhouse gases from 2018- 2020, Unit: Tons



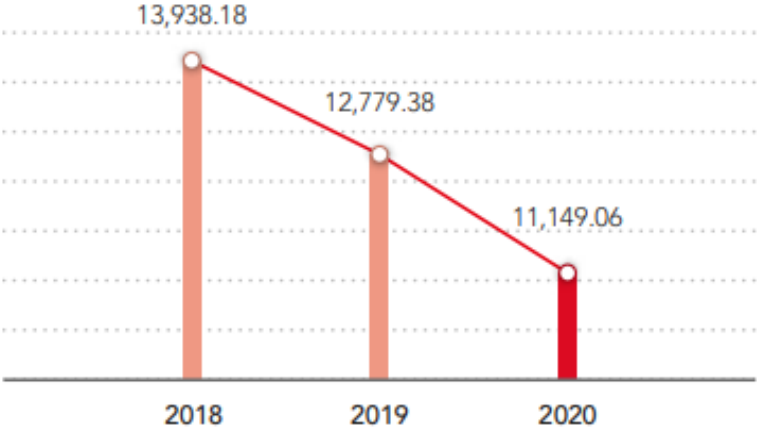
Picture 2.11 – Emission of greenhouse gases per square meter of floor area
Unit: tons/square meter

From picture 2.10 and 2.11, Li Ning Company has reached its goal of reducing emission of greenhouse gases and greenhouse gases per square meter, and it shows a great success in decreasing fossil fuels energy using.

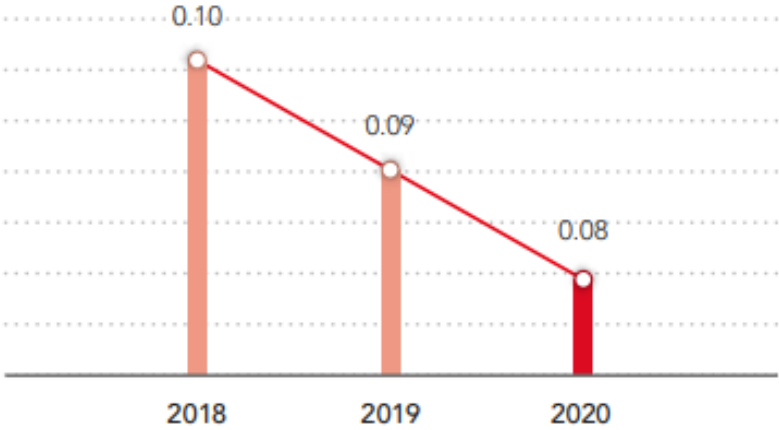
Also, the annual report shows its direct emission is 623.38 tons which includes company car oil consumption 1.30 tons and natural gas 622.08 tons, and indirect emission is 4,111.32 tons by purchasing electricity. Total amount of hazardous waste is 3 0.28 tons. Weight of hazardous waste per square meter of floor area 0.000002 is tons

per square meter. Total amount of non-hazardous waste is 4 581.12 tons. Weight of non-hazardous waste per square meter of floor area is 0.0041 tons per square meter.

In energy and resources consumption, Li Ning also gives a satisfactory answer in Year 2020 (Picture 2.12, 2.13).



Picture 2.12 – Total energy consumption of Li Ning from 2018-2020



Picture 2. 13 – Energy consumption per square meter of floor area

Unit: MWh/square meter

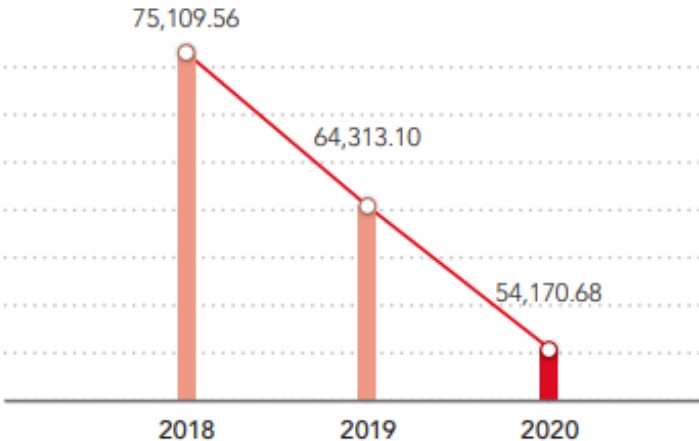
From this part, energy consumption data, including electricity, natural gas and company car oil consumption, is computed according to the relevant conversion factors provided under the “General Principles for Calculation of Comprehensive Energy Consumption (GB/T 2589-2008)”, the national standard of the People’s Republic of China.

We can see obvious decrease of Li Ning’s total energy consumption and energy consumption per square meter of floor area in 2020. The resource management used by

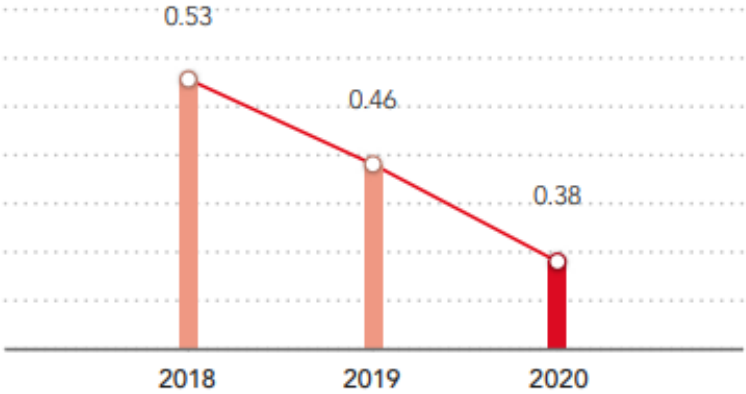
Li Ning includes achieve smart office equipment; transform fresh air-conditioning units in the machine room; promote the use of clean energy; strengthen water management; promote green office and lifestyle; strengthen management of packaging materials; energy saving management for warehouses; energy saving management for stores. They are mentioned before and in 2020 annual report pointed out again. They really get good results in energy saving.

The report shows its 2020 direct energy consumption is 4,807.05 MWh, includes gasoline 5.32 MWh, natural gas 3,181.43 MWh and solar energy 1,620.30 MWh. Also it has indirect energy consumption 6,342.02 MWh total in purchasing electricity.

With sustainable concept, its daily water consumption is also decreasing rapidly. In 2020, Li Ning’s daily water consumption, it has 20938.99- ton decrease compared with Year 2018. (Picture 2.14&2.15)



Picture 2. 14 – Daily water consumption of Li Ning from 2018-2020, Unit: Tons



Picture 2.15 – Daily water consumption per square meter of floor area, Unit: tons/square meter

In 2020, Li Ning's daily water consumption is 54,170.68 tons. Its daily water consumption per square meter of floor area is 0.38 tons/square meter.

In Li Ning's 2020 annual report, Li Ning's total amount of paper used is 320.68 tons. Its total amount of packaging material used for finished products is 420,082.80 tons. Its amount of packaging material for finished products consumed per million revenue is 51.39 tons per million yuan. All above these show a good decreasing consumption in Li Ning's daily life.

Unless otherwise stated, the statistical basis of environmental performance herein covered the company's headquarters and major operating premises of retail subsidiaries in the PRC, including Li-Ning Centre situated in Beijing, Shanghai office area, Foshan office area and Jingmen Logistics Park as well as each of the retail subsidiaries, whereas the rest will be included as and when appropriate in the future.

Summary

Take Li Ning international sportswear company for an example, case analysis method is used in this chapter. For its key economic indicators, it shows stable increasing trend of its overall development in recent years, including its revenue, income, profit, assets, profitability margin and so on. Its products with new technique, such as footwear, apparel, equipment and accessories all get good score in recent years. All of these are closely related to Li Ning's environmental business.

From 2014, which is the year Li Ning company firstly put environmental report as a part of its annual report, Li Ning company takes measures for sustainable development in environmental management policies, supply chain management, product safety and so on. Year 2020, although there is an effect of COVID-19, however, Li Ning gains a good result both in international trade and sustainable development in all its aspects.

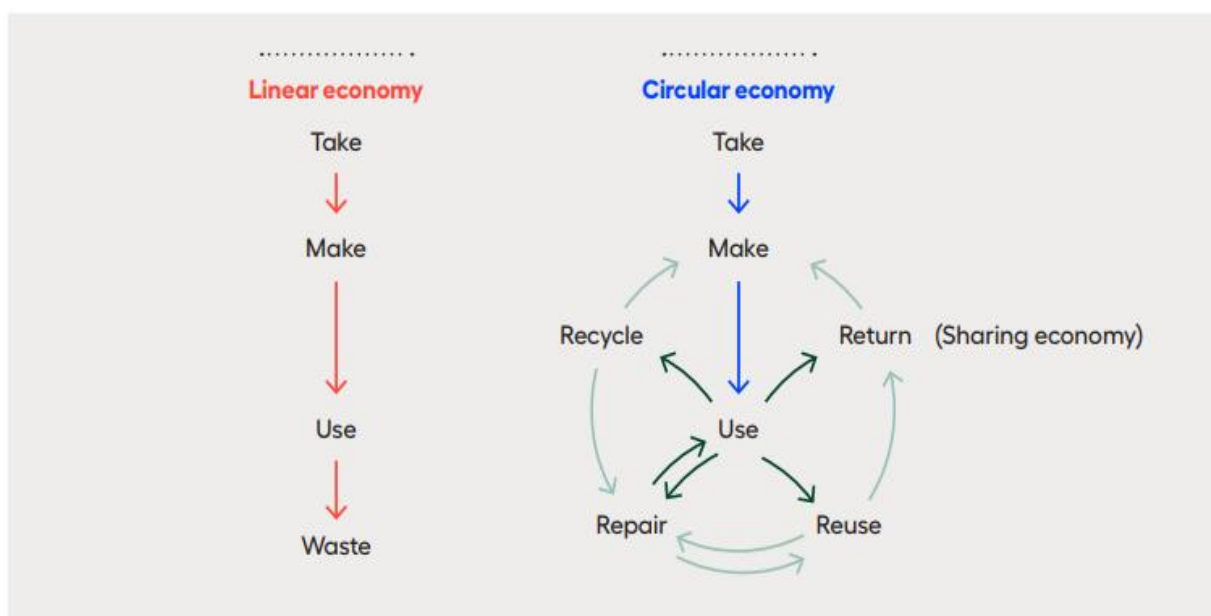
With all the environmental measures, Li Ning obtains more chances in both domestic and foreign market and build good reputation in worldwide.

3. PROSPECTS FOR THE SUSTAINABLE DEVELOPMENT OF INTERNATIONAL BUSINESS

3.1 Environmental benefits of the circular economy of sportswear manufacturers

Environmental benefits are also called environmental protection benefits. In this chapter, I will analyze the changes in Li Ning's economic benefits and corporate image since Li Ning's environmental report was included in the year-end report as a specific section from 2014.

As a large international company, Li Ning has a huge influence in the global market. This chapter also analyzes the relationship between international trade and environmental problems, analyzes the impact of international companies as "leaders" in environmental protection on the impact of the entire international market participants, and emphasizes the importance of Li Ning's corporate development. It plays a leading role in the dual-advanced strategy of environmental protection, and provides suggestions for the sustainable development of international companies.



Source: Human Development Report Office.

Picture 3.1 – How the circular economy differs from the linear

Compare linear economy with circular economy, from the perspective of material flow path, linear economy is a non-circular or one-way straight-line technological economic model operating in accordance with the process of "resource-production-waste-discharge" and "resource-production-consumption-waste-discharge", almost all the resources needed for production come directly from nature. Productive and domestic waste is also discharged almost directly into the environment. The natural environment has become the "material field" and "garbage field" on which human economic activities depend to maintain normally. This kind of development mode has caused huge waste and destruction to resources and environment, which is a kind of predatory economic mode [49].

Circular economy is a kind of according to "resource production - waste - waste resources - production products" and "resources -- production of products -- consumption of waste -- recycling of waste -- production". The technical and economic models of the operation of these two cyclic processes. The operation process of circular economy is relatively complex. "Waste recycling" is the process of resource regeneration, that is, the "waste" through the collection, decomposition or a certain technical treatment of resources can be reused in the process. In essence, circular economy is a theory about sustainable utilization of resources, and resource utility is the eternal theme of circular economy theory [42].

The essential difference between circular economy and linear economy lies in the different measurement standards of resource utility. The resource utility of traditional economy can be measured by current currency, reflecting the pure economic value, while the resource utility of circular economy needs to reflect not only the economic value, but also the environmental value and social value.

Looking at the marketing cases in recent years, there are not a few brands dedicated to environmentally friendly marketing. From a brand perspective, the entry of environmental protection marketing can not only drive users' environmental awareness, but also enhance the brand image to a certain extent, gain consumers' favorability

towards the brand, thereby establishing a better social image and gaining a higher economy benefit.

Through the analysis of the economic benefits of Li Ning Company in recent years in the second chapter of this paper, and the comparison with the study of Li Ning Company's environmental protection methods, we can find that Li Ning cares about sustainable development and the circular economy in international trade. The economic benefits of Li Ning Company in recent years have increased with the impact of Li Ning Company's internal and external implementation of environmental protection measures has shown an upward trend. In addition to the increase in Li Ning's revenue, it is also specifically reflected in the high sales of environmentally friendly products, popular marketing methods, and expansion of sales pages.

Analyzing Li Ning's activities named «from 0 to 1clothing» (pronunciation of 1 and Clothing are the same in Chinese), it can be seen that for the nearly 30-year-old long-established sports brand Li Ning, in addition to using environmental protection for marketing, it is also a move by Li Ning to connect corporate issues with social welfare. Through an offline pop-up event, Li Ning used environmental protection topics to experience a sustainable lifestyle with the officially certified Chinese first international image of a giant panda, "Apu". At the event site, there were scenes such as experience workshops, plastic return workshops, and hand-for-profit workshops for abandoning capital to create an exclusive experience space with environmental protection as the core. The advantage of scene marketing lies in the creation of atmosphere, but the difference is that when Li Ning builds a pop-up store, he also implants a specific “workshop” scene, which is actually a marketing behavior that enhances interaction with consumers. For a brand, it is only one of its purposes to build a scene to bring consumers into the pre-set marketing. How to establish a benign communication between the brand and the consumer is the key to marketing. It can be noticed that in the Li-Ning pop-up store, consumers can «turn waste into treasure» according to their preferences and personal experience. This largely establishes the interaction between the brand and consumers and achieves the marketing purpose of brand concept

dissemination. Joint cooperation with the leading IP in the environmental protection field is a common way for brands to deploy environmental protection marketing. With the help of the IP «environmental protection» label, Li Ning will invisibly form a positive image on the user side, adding environmental protection value to the Li Ning brand.

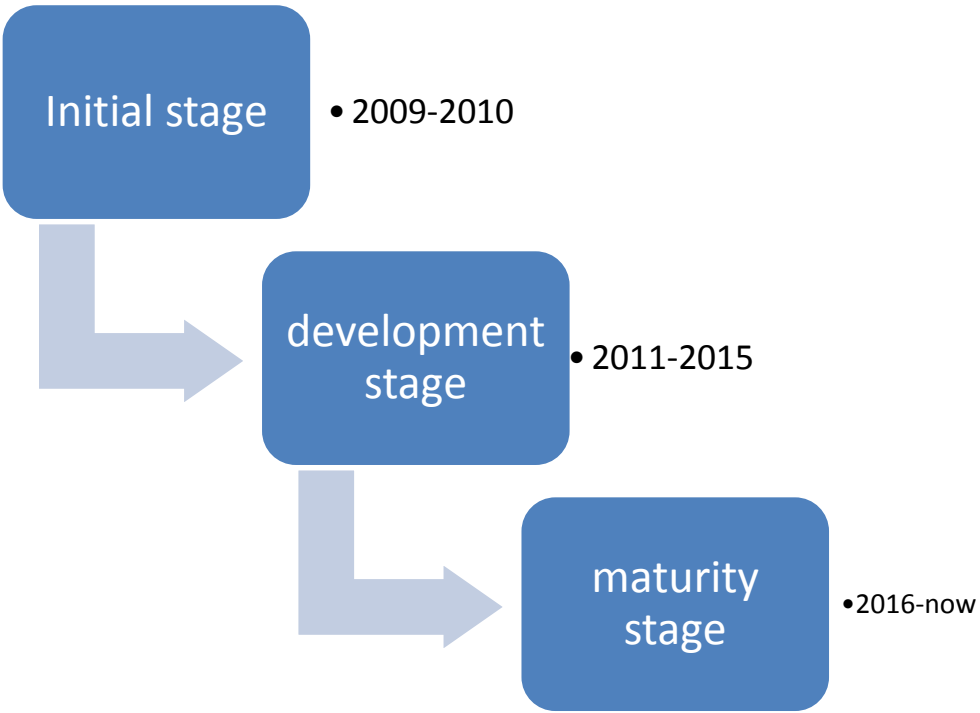


Picture 3.2 – From zero to clothing activity

In 2020, Li Ning's marketing of "from "zero" to "clothing"" not only spreads the concept of environmental protection, but also uses the topic of environmentally friendly manufacturing to increase the brand's popularity and enhance the brand's image through environmental protection. In addition, Li Ning launched a plastic workshop, abandoning capital and hand-made public welfare workshops and other scenes, using offline advantages to highlight the selling point of the new product series using environmentally friendly fiber fabrics, and did a good job of publicizing its new products. The marketing campaign planned by Li Ning with environmental protection as the core not only strengthened the relevance of the brand and environmental protection, but also integrated environmental protection information into the daily life of consumers, thus forming a sustainable development while releasing unique selling points in a good posture.

Beginning in 2014, Li Ning Company officially included the Environmental, Social and Governance Report as part of the Annual report. Before that, Li Ning Company had only the Corporate Social Responsibility Report as a summary of reading the company's annual social responsibility. It can be seen that with the rapid development of economic globalization and the deteriorating global ecological environment, Li-Ning, as a multinational company, has increasingly realized the importance of environmental protection in the process of economic development.

Following is the development of environmental aspects of Li Ning Company.(Picture 3.3)



Picture 3.3 – Development of environmental aspects of Li Ning Company

As for other brands, the leading sports brand, Adidas brand has also contributed to environmental protection. In 2020, Adidas has set the goal of becoming a "plastic waste terminator", that is, by 2024, 100% of sports shoes will use recyclable polyester fibers. In addition, Adidas also launched the "sustainability" series of environmentally friendly sports casual shoes and recyclable high-performance ZX 2K 4D running shoes. The Adidas brand said that from 2024, the company's sports shoes will all be made of TPU

(thermoplastic polyurethane elastomer rubber), and glue will no longer be used for product bonding, because glue is the largest pollutant in recycling.

As early as 2015, Adidas cooperated with the marine environmental protection organization Parley for the Oceans to launch an environmentally friendly sports shoe. The founder of Parley said that the theme of environmental protection has become no longer attractive, and cooperation with the Adidas brand is a way to rely on the creative industry to create public opinion. Sneakers are often a symbol of rebellion and are very close to young consumers.

In 2017, Adidas received an excellent annual report and sold a lot of "junk" sneakers. Adidas' 2017 financial report shows that after the Adidas brand and the marine environmental protection agency Parley for the Oceans cooperated in 2016 and decided to mass-produce sports shoes made of marine debris, in 2017, it sold more than 1 million pairs of environmental protection made of marine plastic waste. Concept sneakers. Adidas and Parley joined forces to combine the two concepts of 3D printing and marine waste recycling to produce a running shoe made of recycled polyester fiber and illegal deep-sea gillnets as 3D printing materials. Adidas named it Ocean Plastic. Subsequently, the cooperation between Adidas and Parley for the Oceans went further and produced three Ultra Boost series sports shoes. It is reported that the upper materials of these environmentally friendly concept shoes are all made of plastic waste recycled from the ocean around the Maldives, including 5% recycled polyester and 95% waste plastic. On average, each pair of sports shoes consumes 11 plastic bottles, including shoe laces, insoles, heels and tongues. Although Adidas' initial concept sports shoes were completed by 3D printing, the brand abandoned 3D printing in the mass production process, and the recycled marine waste was still first converted into useful yarn.

Adidas' 2017 fiscal year performance report shows that mainland China continues to be the fastest-growing market for brands in the world-annual sales growth reached 29%, setting a new record for growth, and the fourth quarter's growth rate was 32%. Global

market sales increased by 16% to 21.2 billion euros, and net income soared 32% to 1.430 billion euros.

In the past, the development of fashion brands such as Adidas tended to follow the trend of fashion groups and attract attention, but now fashion brands are starting to drive the development of the environmental protection industry. Adidas has gained not only a good reputation, but also benefits in terms of reputation risk management and brand value appreciation. Cooperation with environmental protection organizations has also forced the Adidas R&D team to innovate and develop in environmentally friendly materials. In recent years, Adidas has produced more and more environmentally friendly products, and marketing with environmental protection as a selling point has also attracted more and more people.



Picture 3.4 – Adidas sports shoes made of materials such as marine plastic waste and illegal deep-sea gillnets

The "NIKE" brand, which only appeared on the market in 1972, is an out-and-out latecomer in the sporting goods market. Nike's first air cushion technology protects athletes' ankles and knees, and reduces impact and wear as the core. Once the sports shoes with air cushion technology were launched, they were not only popular with consumers, but also brought a technological revolution to the sports world. Since then, Nike has turned its attention to energy conservation and environmental protection on the

basis of fulfilling its commitment to providing athletes with the most advanced technological products, emphasizing that its products can not only help athletes achieve excellent results, but also try to reduce waste generation and toxic in all links of the product production chain. Damage to the natural environment caused by material discharge. Adhering to the tenet of Nike's high performance and low environmental hazard, representing the pinnacle technology of Nike apparel fabrics, polyester fiber raw materials made from waste plastic bottles are used in many top-level competition clothing. The jersey made of this fabric increases the air circulation range and the breathability of the fabric, so that athletes feel more dry, comfortable and cool, and keep their body temperature in the best condition. At the same time, the heat dissipation area on both sides of the jersey adopts Nike's innovative HALO application technology, which is composed of small laser meshes, which can prevent breakage without affecting air circulation [41].

In Nike's international operation, focusing on product development and innovation, and emphasizing the brand's spiritual connotation and cultural core are important parts of Nike's international reputation. The large-scale, multi-level brand marketing strategy in which the environmental protection concept runs through is also an indispensable condition for Nike's success.

Following is shoes made by environmentally friendly technique Flyleather by Nike brand.



Picture 3.5 – Nike Flyleather Jordan 1 SE

Environmental protection technology turns waste into treasure – “Coffee carbon fiber” (Picture 3.6) environmental-friendly limited T-shirts In 2020, we jointly launched T-shirts made exclusively for environmental protection with LOVERE and COSTA. The T-shirts adopted cutting-edged environmental-friendly fabric technology that processed common coffee grounds in daily life into recyclable “coffee carbon fiber”, an environmental-friendly fabric, by sorting, cleaning, crushing and other procedures. The T-shirts launched in this stage take “Essence, Vitality and Spirit (精氣神)” as their theme, with the cartoon playing Tai Chi and the slogan of “Your Actions Will Save The Vitality Of The Earth”, aiming to convey the Group’s philosophy of green environmental protection and building harmonious ecosystem, and appeal to the public to enhance environmental awareness, do outdoor exercise and enjoy a healthy life.



Picture 3.6 – Environmental-friendly limited T-shirts made of coffee carbon fiber

Sustainable development is not a new topic. Closely related to our lives, all walks of life are conducting more explorations on the application of sustainable materials.

Because environmental protection is the eternal proposition of mankind. Sports have the power to unite people. On the big proposition of "environmental protection", the strength of a company alone is not enough to achieve the ultimate goal. Therefore, sports brands need to unite more closely. In this kind of thing that requires everyone to work together, the energy that sports can burst is immeasurable. Multinational companies should also set a good example and role model and make due contributions to the sustainable development of nature.

3.2 Developing Li-Ning's Environmental Benefits to Improve International Competitiveness

With the continuous deepening of economic globalization, more and more companies are going to the world. However, problems such as the inconsistent evaluation standards for environmental protection by multinational companies in various countries and their weak awareness of social responsibility have hindered the improvement of multinational companies' international competitiveness.

First of all, compared with the development of the commodity economy, countries still have insufficient understanding of the concepts of corporate social responsibility and environmental protection. Companies in many countries and regions have not taken corporate social responsibility and environmental protection obligations as a corporate strategy, let alone embedding the concept of environmental protection in their corporate culture. In most economically underdeveloped regions, the corporate social responsibility management system has not yet been formed, and the rapid development of international companies is still achieved by relying on high resource consumption and high environmental pollution. In economically developed regions, many companies also implement methods to transfer pollution to underdeveloped regions and outsource environmental pollution production links in order to reduce costs or to transfer environmental pressure.

Secondly, the unequal rights and obligations of international companies are also one of the reasons for the aggravation of environmental problems. For the purpose of attracting foreign investment and developing the economy, the host country gives a large number of preferential policies to multinational companies. Regardless of the aspects of capital, technical level, human resources, or the massive resources of multinational companies themselves, they provide a great platform for their development and make their business activities occupy a great advantage. However, many multinational companies have not fulfilled the necessary environmental protection obligations while enjoying their rights and interests. Instead, they shirk their responsibilities by reducing costs and failing to pass technical requirements, shifting contradictions, and exacerbating the deterioration of the global environment.[44]

With the deepening of the concept of environmental protection on a global scale, how to turn the economic benefits of environmental protection and corporate image into international competitiveness has become one of the important issues for corporate development.

Enterprises should adjust their foreign trade thinking, appropriately control the scale of foreign trade, and maintain the basic balance of imports and exports. The green trade of enterprises has become a hot topic among international trade. Therefore, in order to improve the investment of human capital, companies must develop green economic trade and take the path of sustainable development. Enterprises should actively introduce advanced technologies at home and abroad, actively research and develop also innovate intellectual property rights, realize the best structure of export commodities, promote technological progress, and reduce the consumption of energy and raw materials. Enterprises must increase the technical content and added value of their products, protect the environment and coordinate the development of trade growth. And on the basis of the sustainable development of trade accounts, promote two-way trade and achieve the common development of environmental protection and goals, so that foreign trade can develop in a long-term and healthy manner.

Finally, as the biggest beneficiaries of the information age, the implementation and promotion of environmental protection concepts by multinational companies can not only promote their own sustainable development, but also play a vital role in promoting global economic development. As a well-known multinational company, Li Ning's marketing methods and management decisions not only affect the commodity economy of all countries in the world, but also integrate into the social culture of each country. Li Ning is now not only a sportswear company selling sneakers and jerseys, but also a company that belongs to the world. It is always transmitting its sales philosophy and corporate culture to the people of the world, and subtly changing people's lifestyles. It is not only Li Ning Company. I believe that in the future, more and more countries and multinational companies will realize that the development of enterprises should not only pay attention to economic profit and expansion of company scale, but also pay attention to the impact of multinational companies on the resources, environment and society life of both sides.

Actions for Sustainable Development In 2015, the United Nations officially adopted the “Transforming our World: The 2030 Agenda for Sustainable Development”, and put forward 17 Sustainable Development Goals (SDGs), aiming at enhancing world peace and freedom, eradicating poverty and hunger, achieving gender equality, addressing problems of climate change, living in harmony with nature and promoting global common prosperity [11].

In September 2016, China promulgated China’s National Plan on Implementation of the 2030 Agenda for Sustainable Development, which, in light of China’s national conditions, which is shown in Appendix B, formulated plans for the implementation of the 17 SDGs.

The Group has taken concrete actions in response to the national plans, and responded to the global call by actively undertaking its responsibilities on the way to achieve global sustainable development, and making possible contributions to help realize the 2030 Sustainable Development Goals [10].

Li Ning strictly comply with the “Social Insurance Laws of the People’s Republic of China” to establish a comprehensive social security system and provide social security benefits for its employees. It provides “five insurances and housing provident fund” and maintain accidental injury insurance and supplemental medical insurance for its employees and carries out public welfare projects such as “Helping Outstanding High School Students from Families with Financial Difficulty in Laibin” and “Li Ning Scholarship in Laibin” to support outstanding high school graduates with financial difficulties. To eliminate poverty, it donates clothing to the impoverished orphans in the “AIDS Affected Children and Adolescents Care and Relief Programme” in conjunction with the Chinese Association of STD and ADIS Prevention and Control.

Since 2012, Li Ning Group has collaborated with China Women’s Development Foundation to organize charitable events. The “Postal Parcels for Mothers” Programme was organized every year to lend a helping hand to mothers struggling with poverty. It establishes a four-in-one staff health management system covering health examination, healthy exercise, healthy diet and supplementary medical treatment. In addition to statutory medical insurance, maintain supplementary commercial insurance covering accident insurance and critical illness insurance for its employees free-of-charge and establishes physical rehabilitation research centers and health consultation rooms to provide its employees with basic medicines for treating and preventing common diseases.

For quality education, Li Ning joins hands with Chinese Athletes Educational Foundation to support the education and sports development in poverty-stricken and remote regions in China with the construction of “Chinese Athletes Hope Primary Schools” and “All-weather Playgrounds”. And carries out public welfare projects such as “Helping Outstanding High School Students from Families with Financial Difficulty in Laibin” and “Li Ning Scholarship in Laibin” to support outstanding high school graduates with financial difficulties.

Li Ning combats gender discrimination in employment, wages, benefits, promotion, training, dismissal and retirement and prohibits suppliers from involving

with any form of gender discrimination in recruitment, establishment of labour relations, access to training, salary, benefits, social insurance, etc. Establishment of “Home of Employees” and Li Ning & OCEG (Koala Educare) Kindergarten so as to assist the employees to maintain a balance between work and family life.

For clean water and sanitation, Li Ning conducts drainage for anti-freezing purpose, and use landscape pond drainage to carry out watering of plants within the park for anti-freezing, thus, to improve the utilization rate of water resources. It conducts regular maintenance of water-use equipment to prevent water resource waste caused by the leakage of equipment. It posts promotional slogans about water conservation in common areas such as restrooms and pantries. The group requires suppliers to develop management systems to reduce the discharge of wastewater from production and operation activities and strictly prohibit the illegal discharge of sewage. It also conducts stringent review of the wastewater monitoring report and sewage discharge permit of the Group’s suppliers and carry out tests on suppliers’ wastewater data to enhance the monitoring and control over wastewater along the supply chain and requires the suppliers to conduct at least one wastewater test per year, with T2 plants currently conducting wastewater testing accounting for more than 95% of the material orders. The group participates in the formulation of and comply with ZDHC Wastewater Guidelines.

Li Ning promises to afford clean energy, installs solar panels at the roof-top of the buildings within the office park of the Beijing headquarters, thereby providing part of the electricity required for daily operation in the office park and installs air conditioning and fresh air units to fully utilize the low temperature environment during winter to cool down the machine room and reduce electricity consumption. Also, it installs plenty of electric vehicle charging piles in the office park in the headquarters to encourage employees to commute by environmental-friendly electric vehicles. The group encourage and promote suppliers to manage energy system and regularly track and streamline the energy consumption data of suppliers.

The group joins China National Textile and Apparel Council Life Cycle Assessment (CNTAC-LCA) Working Group to jointly guide the industry to accelerate green transformation, optimize energy conservation and emission reduction and environmental management path of supply chain. The group assists the Social Responsibility Office of China National Textile and Apparel Council in compiling the “Circular Fashion: Prospects of China’s New Textile Economy”, and jointly discuss on the current situation and opportunities of industrial circular transformation, circular economy and sustainable fashion as an expert committee. Also, it joins the China 2030 Action for Climate Innovation to promote the industrial transformation towards low carbon operation. It encourages the staff to use public transportation and provide convenient shuttle bus services for staff working in the office park of the Group’s headquarters to reduce carbon emission for commuting to work.

Also, it did a lot for handling climate changes. Li Ning keeps enhancing employees’ awareness of energy conservation and promote green lifestyle and encourages staff to more frequently use environmental-friendly electric vehicles and public transportation and introduce professional shuttle bus service companies for the office park of the headquarters in Beijing to reduce the use of private cars. It continuously promotes the paperless office by requiring employees to process their daily work through office automation systems and electronic devices.

Li Ning joins the China Fashion Industry Climate Leadership Programme to jointly build lowcarbon brands and low-carbon supply chains and the “Climate Stewardship 2030 and build related brands. Also, it collects data in relation to energy consumption and climate change from the supply chain on a quarterly basis with a view to enhancing the management of carbon emission along the supply chain.

In the procedure of Li Ning’s international trade, it actively participates in the resolutions and elections for major affairs of the Zero Discharge of Hazardous Chemicals (ZDHC) Programme and joins China National Textile and Apparel Council Life Cycle Assessment (CNTAC-LCA) Working Group. Also, it joins the China Fashion Industry Climate Leadership Programme for tackling global warming.

Summary

At the beginning of Chapter 3, it learnt linear economy and circular economy, Obviously, circular economy is responsible for sustainable development in international trade and the world ecology. In fact, many multinational companies have realized the importance of keeping sustainable development concept. While they are taking many environmental measures, their research and development level are improved. In addition, the saved energy has cut their expense in daily life. They can adopt different international regulation quickly, thus, they exploit bigger international market and build better worldwide fames.

Suggestions for Li Ning Company to maintain its sustainable development are in this chapter, we hope that it can keeps its methods used in environmental, social and governance report, such as its climate action, responsible consumption and production, Industry, innovation, and infrastructure, affordable and clean energy, clean water and sanitation, partnerships for the goals, like ZDHC and CNTAC-LCA, etc., to keep its sustainable development in international business and build great reputation, gain benefits from environmental aspects.

CONCLUSION

The term "ecological environment" has long been acquiesced to the materialized space for human existence and the natural resources and external materialized conditions on which economic activities depend, including the atmosphere, water, ocean, land, minerals, forests, grasslands, wild animals, natural relics, nature reserves, scenic spots, cities and villages, etc.

The main content of my master thesis is divided into four parts. The first part is about the theory of international business development on the global ecological environment. The second part introduces Li Ning Company and does a case analysis of its functions in environmental aspects. The third part is environmental benefits gain by international companies during their sustainable international business. The fourth part is suggestions of multinational companies following SDGs (Sustainable Development Goals by the UN) and turning environmental benefits into international competitive.

The first, International trade and the ecological environment influence and restrict each other. How to coordinate the harmonious development of international trade and the ecological environment has become a key subject that international companies are actively exploring, and it is also the focus of attention of the whole international community. The establishment of an environment-friendly society, the establishment of a scientific outlook on development, and the promotion of the harmonious development of international trade are issues that the entire human society needs to address.

As an inevitable trend of economic globalization, international trade cannot be stopped. Multinational companies must actively reduce its negative impact to the greatest extent in any procedure of its international business, and actively take measures to improve and upgrade it from multiple aspects and levels. Strengthen the sense of responsibility for environmental pollution, use scientific methods to deal with ecological problems, further internalize environmental costs, recognize the risks in international trade, predict possible risk are all indispensable parts of the balance with the ecological environment.

The innovation of this article is to select specific company—— international sports goods company, Li Ning Group as an example, relate its business development, market expansion, reputation building to its environmental measures used, analyze its environmental management methods in production, sales, daily office and other links, evaluate environmental benefits.

However, there are still many shortcomings and deficiencies in choosing this article, and it does not take into account the environmental impact of more types of multinational companies. In addition, the data found in this article are basically derived from Li Ning's annual report, and t due to the difficulty of obtaining data, this article only selects Chinese multinational company Li Ning as samples. At last, because Chinese multinational companies are limited by national conditions and policies, this article is not complete in the selection of financial indicators.

If conditions are available in the future, the study should select more domestic and foreign samples for comprehensive analysis and comparison.

I hope that through this article, multinational companies can shoulder the social responsibility of economic development and environmental protection, so that the sustainable development of the economy and society can be realized.

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APPENDIX A

Environmental Sustainability of countries [11]

Country groupings (terciles): [Top third](#) [Middle third](#) [Bottom third](#)

Three-colour coding is used to visualize partial grouping of countries by indicator. For each indicator countries are divided into three groups of approximately equal size (terciles): the top third, the middle third and the bottom third. Aggregates are colour coded using the same tercile cutoffs. See Notes after the table.

HDI RANK	SDG 12.c			SDG 9.4		SDG 15.1		SDG 6.4		SDG 8.4, 12.2		SDG 3.9		SDG 3.9		SDG 15.1, 11.5, 13.1		SDG 15.3		SDG 15.5	
	Carbon dioxide emissions					Forest area		Use of fertilizer nutrient per area of cropland		Domestic material consumption per capita		Household and ambient air pollution		Mortality rate attributed to		Number of deaths and missing persons attributed to disasters		Degraded land	Red List Index		
	Fossil fuel energy consumption	Production emissions per capita	Per unit of GDP			Fresh water withdrawals	Nitrogen (N)	Phosphorus (expressed as P ₂ O ₅)			Household and ambient air pollution	Unsafe water, sanitation and hygiene services									
	(% of total energy consumption)	(tonnes)	(kg per 2010 US\$ of GDP)	(% of total land area)	Change (%)	(% of total renewable water resources)	(kg per hectare)	(kg per hectare)	(tonnes)	(per 100 000 population, age standardized)	(per 100,000 population)	(per 100,000 population)	(per 100,000 population)	(% of total land area)	(value)						
2013-2015 ^a	2018	2017	2016	1990/2016	2007-2017 ^b	2018	2018	2017	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	
Very high human development																					
1	Norway	57.0	8.3	0.11	33.2	-0.1	0.8	127.0	25.3	21.8	9	0.2	4.4	--	--	--	--	--	--	0.939	
2	Ireland	85.3	8.1	0.11	11.0	63.4	1.5	--	--	13.5	12	0.1	0.1	--	--	--	--	--	--	0.915	
2	Switzerland	50.2	4.3	0.08	31.8	9.3	3.8	105.2	33.5	13.7	10	0.1	3.7	--	--	--	--	--	--	0.975	
4	Hong Kong, China (SAR)	93.2	5.9	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.831	
4	Iceland	11.3	10.8	0.13	0.5	213.7	0.2	97.1	16.9	14.9	9	0.1	--	--	--	--	--	--	--	0.863	
6	Germany	78.9	9.1	0.20	32.7	1.0	15.9	112.5	16.9	14.7	16	0.6	--	--	--	--	--	--	--	0.984	
7	Sweden	25.1	4.1	0.08	68.9	0.8	1.4	72.1	12.8	16.9	7	0.2	0.0	--	--	--	--	--	--	0.992	
8	Australia	89.6	16.9	0.34	16.3	-2.8	3.2	45.1	30.5	37.9	8	0.1	0.0	--	--	--	--	--	--	0.821	
8	Netherlands	93.5	9.5	0.19	11.2	9.4	8.8	--	--	13.7	14	0.2	--	--	--	--	--	--	--	0.940	
10	Denmark	64.9	6.1	0.12	14.7	14.7	12.4	79.3	12.2	15.7	13	0.3	--	--	--	--	--	--	--	0.972	
11	Finland	40.2	8.5	0.19	73.1	1.8	--	61.6	11.3	24.7	7	0.1 ^c	0.1	1	0.990	--	--	--	--	0.990	
11	Singapore	90.6	7.1	0.10	23.1	-5.5	83.2	--	--	32.6	26	0.1	--	--	--	--	--	--	--	0.853	
13	United Kingdom	80.4	5.6	0.14	13.1	13.8	5.7	169.8	30.9	7.8	14	0.2	0.1	--	--	--	--	--	--	0.781	
14	Belgium	75.9	8.7	0.19	22.6	--	21.8	195.0	21.3	16.1	16	0.3	--	--	11	0.986	--	--	--	0.986	
14	New Zealand	59.7	7.3	0.19	38.6	5.1	3.0	--	--	24.2	7	0.1	0.0	--	--	0.623	--	--	--	0.623	
16	Canada	74.1	15.3	0.35	38.2	-0.4	1.2	71.3	29.1	28.8	7	0.4	--	--	--	0.964	--	--	--	0.964	
17	United States	82.4	16.6	0.27	33.9	2.7	14.5	72.6	25.4	20.3	13	0.2	1.2	--	--	0.833	--	--	--	0.833	
18	Austria	65.7	7.7	0.17	46.9	2.6	4.5	82.0	22.4	15.8	15	0.1	0.0	--	--	0.894	--	--	--	0.894	
19	Israel	97.4	7.7	0.23	7.7	26.7	67.3	103.9	12.6	13.0	15	0.2	--	--	--	0.723	--	--	--	0.723	
19	Japan	93.0	9.1	0.23	68.5	0.0	18.9	88.0	80.3	9.0	12	0.2	0.4	--	--	0.776	--	--	--	0.776	
19	Liechtenstein	--	4.0	--	43.1	6.2	--	--	--	--	--	--	--	--	--	0.993	--	--	--	0.993	
22	Slovenia	61.1	6.9	0.21	62.0	5.1	2.9	115.8	38.7	13.4	23	0.1 ^c	1.1	5	0.930	--	--	--	--	0.930	
23	Korea (Republic of)	81.0	12.9	0.32	63.4	-4.1	--	135.4	90.0	15.9	20	1.8	0.3	--	--	0.702	--	--	--	0.702	
23	Luxembourg	80.6	15.9	0.17	35.7	--	1.3	204.8	14.3	28.5	12	0.1 ^c	--	4	0.987	--	--	--	--	0.987	
25	Spain	73.0	5.7	0.16	36.9	33.6	28.0	61.6	25.4	11.9	10	0.2	0.1	18	0.854	--	--	--	--	0.854	
26	France	46.5	5.2	0.12	31.2	18.5	12.5	117.5	22.5	11.9	10	0.3	2.4	12	0.872	--	--	--	--	0.872	
27	Czechia	77.7	9.9	0.30	34.6	1.6	12.4	138.9	20.3	16.9	30	0.2	0.0	6	0.971	--	--	--	--	0.971	
28	Malta	97.8	3.6	0.09	1.1	0.0	85.2	125.1	8.9	15.5	20	0.1 ^c	--	--	0.884	--	--	--	--	0.884	
29	Estonia	13.1	14.8	0.43	51.3	-1.4	13.9	56.2	13.4	35.0	25	0.1 ^c	0.8	--	0.985	--	--	--	--	0.985	
29	Italy	79.9	5.6	0.16	31.8	23.2	17.9	65.7	17.5	10.8	15	0.1	0.1	13	0.899	--	--	--	--	0.899	
31	United Arab Emirates	86.1	21.3	0.32	4.6	32.1	1,708.0	185.3	50.8	22.5	55	0.1 ^c	--	1	0.857	--	--	--	--	0.857	
32	Greece	82.6	7.0	0.24	31.7	23.8	16.4	55.7	18.4	10.0	28	0.1 ^c	--	16	0.845	--	--	--	--	0.845	
33	Cyprus	92.9	6.3	0.23	18.7	7.2	27.7	60.1	40.1	19.5	20	0.3	1.4	19	0.982	--	--	--	--	0.982	
34	Lithuania	68.0	4.8	0.14	34.8	12.3	1.1	74.1	23.9	15.3	34	0.1	--	3	0.989	--	--	--	--	0.989	
35	Poland	90.3	9.1	0.30	30.9	6.5	16.7	96.0	29.4	18.5	38	0.1	--	5	0.972	--	--	--	--	0.972	
36	Andorra	--	6.1	--	34.0	0.0	--	--	--	--	--	--	--	--	0.916	--	--	--	--	0.916	
37	Latvia	56.7	3.7	0.14	54.0	5.8	0.5	57.2	20.2	17.0	41	0.1 ^c	--	13	0.988	--	--	--	--	0.988	
38	Portugal	77.0	5.0	0.18	34.6	-7.8	11.8	59.2	28.1	10.0	10	0.2	--	32	0.870	--	--	--	--	0.870	
39	Slovakia	64.1	6.6	0.20	40.4	1.0	1.1	94.5	18.8	10.7	34	0.1 ^c	--	4	0.961	--	--	--	--	0.961	
40	Hungary	69.5	5.1	0.18	22.9	14.3	4.3	94.2	26.0	16.9	39	0.2	--	13	0.875	--	--	--	--	0.875	
40	Saudi Arabia	99.9	18.4	0.34	0.5	0.0	883.3	47.8	26.3	25.0	84	0.1	--	4	0.907	--	--	--	--	0.907	
42	Bahrain	99.4	19.8	0.47	0.8	145.9	132.2	--	--	28.6	40	0.1 ^c	--	--	0.751	--	--	--	--	0.751	
43	Chile	74.6	4.6	0.22	24.3	18.2	--	157.1	47.2	41.8	25	0.2	0.3	1	0.763	--	--	--	--	0.763	
43	Croatia	70.7	4.5	0.18	34.4	3.8	0.6	113.5	40.7	10.1	35	0.1	0.6	--	0.897	--	--	--	--	0.897	
45	Qatar	100.0	38.0	0.26	0.0	0.0	432.4	82.4	29.4	52.5	47	0.1 ^c	--	6	0.821	--	--	--	--	0.821	
46	Argentina	87.7	4.4	0.22	9.8	-22.9	4.3	28.8	17.1	16.1	27	0.4	0.0	39	0.849	--	--	--	--	0.849	
47	Brunei Darussalam	100.0	18.5	0.22	72.1	-8.0	--	--	--	22.9	13	0.1 ^c	--	--	0.861	--	--	--	--	0.861	
48	Montenegro	64.7	3.2	0.22	61.5	32.1	--	--	--	13.4	79	0.1 ^c	0.5	6	0.806	--	--	--	--	0.806	
49	Romania	72.5	3.8	0.16	30.1	8.4	3.2	37.7	13.8	11.7	59	0.4	6.3	2	0.930	--	--	--	--	0.930	

End of Appendix A

HDI RANK		SDG 12.c			SDG 9.4		SDG 15.1		SDG 6.4		SDG 8.4, 12.2		SDG 3.9		SDG 3.9		SDG 15.1, 15.131		SDG 15.3		SDG 15.5				
		Carbon dioxide emissions						Use of fertilizer nutrient per area of cropland						Environmental threats											
		Fossil fuel energy consumption		Production emissions per capita		Per unit of GDP		Forest area		Fresh water withdrawals		Nitrogen (N)		Phosphorus (expressed as P ₂ O ₅)		Domestic material consumption per capita		Household and ambient air pollution		Mortality rate attributed to Unsafe water, sanitation and hygiene services		Number of deaths and missing persons attributed to disasters		Degraded land	Red List Index
		(% of total energy consumption)	(tonnes)	(kg per 2010 US\$ of GDP)	(% of total land area ^a)	Change (%)	(% of total renewable water resources)	(kg per hectare)	(kg per hectare)	(tonnes)	(per 100 000 population, age standardized)	(per 100,000 population)	(per 100,000 population)	(per 100,000 population)	(% of total land area)	(value)									
2013-2015 ^b	2018	2017	2016	1990/2016	2007-2017 ^c	2018	2018	2017	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016		
51	Kazakhstan	99.2	17.6	0.60	1.2	-3.3	20.7	3.5	41	29.1	63	0.4	0.0	36	0.867										
52	Russian Federation	92.1	11.7	0.48	49.8	0.8	1.4	12.5	4.9	16.9	49	0.1	0.4	6	0.954										
53	Belarus	92.4	6.9	0.34	42.6	11.1	2.4	69.5	18.0	17.5	61	0.1	..	1	0.970										
54	Turkey	86.8	5.2	0.19	15.4	22.8	27.8	65.9	22.5	18.7	47	0.3	0.1	9	0.876										
55	Uruguay	46.3	2.0	0.08	10.7	134.1	..	85.8	75.9	37.6	18	0.4	0.1	26	0.855										
56	Bulgaria	71.0	6.3	0.33	35.4	17.6	26.6	92.1	19.2	19.6	62	0.1	0.0	..	0.941										
57	Panama	80.7	2.6	0.11	61.9	-8.7	0.9	15.5	9.9	7.6	26	1.9	0.6	14	0.746										
58	Bahamas	..	4.7	..	51.4	0.0	..	55.2	32.6	3.0	20	0.1	..	..	0.702								
58	Barbados	..	4.5	..	14.7	0.0	..	28.8	20.9	2.3	31	0.2	1.4	..	0.898										
60	Oman	100.0	13.9	0.38	0.0	0.0	116.7	93.9	28.3	31.7	54	0.1 ^d	..	7	0.891										
61	Georgia	72.2	2.6	0.25	40.6	2.6	2.9	95.9	8.4	6.8	102	0.2	0.2	6	0.871										
62	Costa Rica	49.9	1.6	0.10	54.6	8.7	2.8	165.2	28.7	8.6	23	0.9	0.1	9	0.831										
62	Malaysia	96.6	8.1	0.25	67.6	-0.7	1.2	46.2	36.8	19.3	47	0.4	0.0	16	0.769										
64	Kuwait	93.7	23.7	0.34	0.4	81.2	..	..	..	29.6	104	0.1 ^e	0.0	64	0.838							
64	Serbia	83.9	5.2	0.49	31.1	9.9	3.3	41.7	7.9	11.8	62	0.7	0.0	6	0.957										
66	Mauritius	84.5	3.8	0.17	19.0	-6.0	22.2	93.8	30.8	11.6	38	0.6	0.8	27	0.413										
High human development																									
67	Seychelles	..	6.7	..	88.4	0.0	..	30.2	7.6	2.3	49	0.2	1.0	12	0.686										
67	Trinidad and Tobago	99.9	31.3	0.47	46.0	-1.9	8.8	138.3	10.6	19.9	39	0.1	0.1	..	0.806										
69	Albania	61.4	1.6	0.13	28.1	-2.3	3.9	35.6	19.2	10.1	68	0.2	0.1	8	0.838										
70	Cuba	85.6	2.5	0.11	31.3	63.2	18.3	15.0	6.6	7.7	50	1.0	..	..	0.663								
70	Iran (Islamic Republic of)	99.0	8.8	0.38	6.6	17.8	..	34.3	6.0	14.8	51	1.0	0.0	23	0.842										
72	Sri Lanka	50.5	1.1	0.09	32.9	-9.7	..	29.0	17.3	5.6	80	1.2	0.5	36	0.574										
73	Bosnia and Herzegovina	77.5	6.5	0.57	42.7	-1.1	1.1	61.5	7.0	14.0	80	0.1	..	4	0.901										
74	Grenada	..	2.4	..	50.0	0.0	7.1	..	..	1.0	45	0.3	..	..	0.675						
74	Mexico	90.4	3.8	0.21	33.9	-5.5	19.0	50.1	31.1	10.0	37	1.1	0.5	47	0.677										
74	Saint Kitts and Nevis	..	4.6	..	42.3	0.0	51.3	..	..	..	..	..	3.9	..	0.734					
74	Ukraine	75.3	5.1	0.52	16.7	4.4	4.9	41.6	12.2	12.5	71	0.3	0.0	25	0.934										
78	Antigua and Barbuda	..	5.9	..	22.3	-4.9	8.5	1.7	0.5	2.8	30	0.1	3.2	..	0.890										
79	Peru	79.6	1.7	0.13	57.7	-5.3	0.9	51.2	15.6	15.4	64	1.3	0.5	..	0.729										
79	Thailand	79.8	4.2	0.22	32.2	17.3	13.1	71.1	17.3	12.7	61	3.5	0.1	21	0.783										
81	Armenia	74.6	1.9	0.20	11.7	-0.8	36.9	178.5	0.1	11.1	55	0.2	14.4	2	0.845										
82	North Macedonia	79.4	3.5	0.27	39.6	10.3	8.2	39.0	9.0	14.5	82	0.1	..	..	0.970								
83	Colombia	76.7	2.0	0.12	52.7	-9.2	0.5	57.1	19.9	6.8	37	0.8	0.8	7	0.749										
84	Brazil	59.1	2.2	0.15	58.9	-9.9	0.8	80.6	80.3	17.4	30	1.0	0.1	27	0.900										
85	China	87.7	7.0	0.45	22.4	33.6	20.9	208.5	58.0	25.0	113	0.6	0.0	27	0.743										
86	Ecuador	86.9	2.5	0.20	50.2	-5.0	..	87.7	16.8	9.3	25	0.6	0.0	30	0.660										

APPENDIX B

Sustainable Development Goals (SDGs) of China

Sustainable Development Goals of China	
SDG1 No poverty	<ul style="list-style-type: none"> • Improve social security system and implement the plan for universal participation in social insurance • Implement precision poverty eradication and relief for rural poor population
SDG2 Zero hunger	<ul style="list-style-type: none"> • Ensure that everyone has safe, nutritious and sufficient food all year • Provide nutrition guidance and intervention for targeted groups such as teenage girls, pregnant women, women who are lactating and elderly women
SDG3 Good health and well-being	<ul style="list-style-type: none"> • Promote equality of and accessibility to basic medical and healthcare services
SDG4 Quality education	<ul style="list-style-type: none"> • Safeguard equal rights of underprivileged groups for receiving compulsory education • Implement a model for cultivation of technologies, skills and talents through collaboration between the Group and schools • Strengthen sports education in schools
SDG5 Gender equality	<ul style="list-style-type: none"> • Adhere to the basic national policy of gender equality to eliminate all forms of discrimination and bias against women • Enhance the working and entrepreneurial capability of women by offering public childcare services
SDG6 Clean water and sanitation	<ul style="list-style-type: none"> • Significantly increase the proportion of treated compliant wastewater by strengthening the supervision and monitoring over major water functional zones and river outlets • Comprehensively promote the development of a water-saving society by strengthening the management over water demand and water utilization process

Sustainable Development Goals of China	
SDG7 Affordable and clean energy	<ul style="list-style-type: none"> •Optimize the energy structure by enhancing the utilization rate of fossil fuel energy and increasing the proportion of clean energy consumption • Develop modern energy system that is clean, low carbon consumption, safe and highly efficient
SDG8 Decent work and economic growth	<ul style="list-style-type: none"> •Promote the development of the manufacturing industry towards a highend, intelligent, green and serviceoriented direction • Improve the employment and entrepreneurial service system and implement a life-long vocational skills training system
SDG9 Industry, innovation, and infrastructure	<ul style="list-style-type: none"> •Accelerate the upgrading and transformation of traditional industries and promote low-carbon industrial energy use
SDG10 Reduced inequalities	<ul style="list-style-type: none"> • Attach great importance to providing equal opportunities and ensuring equal rights of participation and development for all employees • Consistently promote growth of both resident income and the economy, as well as growth of both salary and work productivity at the same time
SDG11 Sustainable cities and communities	<ul style="list-style-type: none"> • Implement development strategy that prioritize public transportation to promote the development of sustainable urban transportation system
SDG12 Responsible consumption and production	<ul style="list-style-type: none"> • Reduce the adverse impact of chemicals on human health and the environment • Significantly enhance the level of green chemical engineering technology • Strenuously develop circular economy with significant increase in the recycling of major types of wastes • Comprehensively promote the extended producer responsibility system to encourage enterprises to fully implement the concept of sustainable development in their production management

Sustainable Development Goals of China	
SDG13 Climate action	<ul style="list-style-type: none"> • Popularize the knowledge about climate change and low-carbon development concepts with guidance to the general public for active participation in actions against climate change
SDG16 Peace, justice and strong institutions	<ul style="list-style-type: none"> • Implement the “Law on the Protection of Minors”, and crack down, in accordance with the laws, on the unlawful and criminal acts such as use of child and forced labour, child abduction and trafficking
SDG17 Partnerships for the goals	<ul style="list-style-type: none"> • Actively participate in the establishment of global partnerships to promote more balanced global partnerships for development • Actively participate in the works in relation to the establishment of mechanisms for enhancing the use of global technology