POLICY STUDY OF GLOBAL GREEN VALUE CHAINS

STRATEGIES: ACTION PLAN FOR GREENING CHINA’S SOFT COMMODITY VALUE CHAINS

December 2022
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Food and land-use system accounts for about one third of the global greenhouse gas emissions. Changes in land use, such as deforestation and wasteland reclamation in the tropics, exert profound impacts on such emissions, and play a crucial role in addressing the challenges of climate change. In particular, due to ever-growing global demand for soybeans, beef, palm oil, paper, paper sheets, as well as soft bulk commodities (such as cocoa and rubber), demand for land use also imposes great pressure and poses high risks on tropical rainforests which is an important cornerstone for the stability of the Earth’s ecosystems and climate.

Tropical Forest Alliance (TFA) of the World Economic Forum is a multi-stakeholder platform comprising more than 170 partners, including enterprises, governments, civil societies, local communities and international organizations. This platform aims to support and facilitate dialogues between the public and private sectors, and promote joint commitment of the public and private sectors through “forest-benefit” collective action. TFA China Office was established during the World Economic Forum’s Annual Meeting of the New Champions 2019 in Dalian, China. Under the leadership of the Steering Committee, TFA China Office is committed to building the commitment of multi-sector business stakeholders on “forest-positive” action and the roadmap, while enhancing the role of policies in driving the establishment of the national strategy and inter-ministerial coordination mechanism for China’s soft commodity green value chains.

China Council for International Cooperation on Environment and Development (CCICED) introduces advanced international concepts of sustainable development to China; promotes exchanges and mutual learning between China and the international community in the field of environment and development; and serves as an important platform for the world to understand China and for China to reach out to the world through candid dialogues between China and the rest of the world. In Global Green Value Chains: Greening China’s “Soft Commodity” Value Chains, the 2020 Special Policy Study Report of CCICED, it is suggested to implement China’s national strategy of soft commodity green value chains and establish a policy and institutional support framework. China is advised to announce the policy study and action plan of its national strategy of soft commodity green value chains at the 15th Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP15). To this end, Tropical Forest Alliance of World Economic Forum, Foreign Environmental Cooperation Center of Chinese Ministry of Ecology and Environment and World Resources Institute jointly set up a task force to work out “Policy study on Soft Commodity Green Value Chains” since 2021.
On the basis of suggestions from more than 50 experts and scholars through three online and offline panel discussions, Study on Strategy of Global Green Value Chains—Action Plan for Greening China’s Soft Commodity Value Chains has been formulated. The Action Plan identifies the following six priorities and with 20 action goals:

» To establish a domestic soft commodity green value chain management system
» To establish a soft commodity green value chain management technology support system
» To promote technological innovations related to soft commodity green value chains
» To carry out pilot projects for soft commodity green value chain management
» To exert more efforts for concept publicity and capacity building for green value chains
» To promote in international joint actions for soft commodity green value chains

In the new stage of development, China will vigorously promote the development of an ecological civilization, put forward and implement the new concept for development, make greater efforts to promote high-quality development, and shape a new development pattern. By upholding the philosophy that “lucid waters and lush mountains are invaluable assets”, China strengthens ecological environment protection in all aspects, across all regions and throughout the whole process. As a result, more sound institutions and systems of ecological civilization prevail, while epoch-making, transformational and holistic changes have taken place in ecological environment protection. In recent years, China has taken an active part in the reform and development of the global governance system. China has also practised and shared its vision of global governance with the rest of the world, with the aim of helping developing countries accelerate their development pace and rise to the challenges posed by climate change.

TFA and Foreign Environmental Cooperation Center of Chinese Ministry of Ecology and Environment will continue to collaborate with a wide range of stakeholders, promote China to fulfill its commitment to and deepen international cooperation on Paris Agreement Under the United Nations Framework Convention on Climate Change, Glasgow Leaders’ Declaration on Forests and Land Use, China-U.S. Joint Glasgow Declaration on Enhancing Climate Action in the 2020s and Joint Press Communique of the Second China-EU High-level Dialogue on Environment and Climate, and continuously build sustainable international governance mechanisms and a future of harmonious coexistence between man and nature.

“CHINA WILL VIGOROUSLY PROMOTE THE DEVELOPMENT OF AN ECOLOGICAL CIVILIZATION, PUT FORWARD AND IMPLEMENT THE NEW CONCEPT FOR DEVELOPMENT, MAKE GREATER EFFORTS TO PROMOTE HIGH-QUALITY DEVELOPMENT, AND SHAPE A NEW DEVELOPMENT PATTERN”

For the next step, the task force will make every effort to hold thematic symposiums and share ideas on hot topics from different viewpoints so as to reach consensus on specific topics. At the same time, the task force will vigorously contribute to research and establishment of inter-ministerial coordination mechanism, promote the initiative of multiple departments to enhance the Policy study work of the green value chain of bulk soft commodities, and help China constantly forge ahead towards the sustainable development goals and realize the great vision of building a Community with a Shared Future for Mankind in the process of fulfilling the commitments.
1. INTRODUCTION

The concept of “global value chain (GVC)” generally refers to the worldwide, cross-enterprise network in connected production, sales and recycling process as enterprises seek commodity or service value, involving the whole process from purchase and shipment of raw materials, production and distribution of semi-finished and finished products, to final consumption and recycling.

The past decades have witnessed the growth of GVCs, which has flourished global trade, enhanced the international division of labor, leveraged resources of countries, promoted the production and consumption efficiency of global commodities and driven the world economy forward. The cross-regional environment effects on economic activities and global-local correlations are increasingly prominent. Meanwhile, the negative impact brought by GVCs to global biodiversity, climate change, ecosystems and functions, as well as community rights and livelihoods in commodity origins cannot be underrated. In fact, people have come to realize the significance of building low-carbon and eco-friendly global value chains, that is, green value chains.

Nevertheless, the lack of a fair and feasible driving mechanism for green GVCs, and imbalanced local progress are a far cry from the desired sustainable development. Since the 1980s, countries around the globe have launched extensive exploration, research and practice regarding the environment issues of GVCs, the settlement of environment rights disputes between developed and developing countries, and the involvement of economies and local markets in the green upgrading of GVCs.

Throughout the process, international organizations, multilateral agreements and initiatives have played a crucial role. To give a few examples, the environment standards developed by the International Organization for Standardization (ISO) define entry criteria for the worldwide cross-enterprise network; governments promote green value chains by introducing regulations and green purchasing, a case in point is the environment clauses in regional and bilateral FTAs; and the United Nations Global Compact (UNGC) urges balance between profit and environment by promoting corporate social responsibility (CSR).

GVCs incorporate the organization of all participants and activities connected to production and trade, and the distribution of their derivative value and profit. Companies located in

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1 A definition by the United Nations Industrial Development Organization (UNIDO)
different parts of the world are engaged in the value chain processes by which value is added across different sectors from design, product development, manufacturing, marketing, delivery, consumption, after-sales service, to the final cyclic utilization. The greening of value chains, characterized by low-carbon and environment-friendly production and consumption, offers an efficient market mechanism to mobilize all sectors of the value chains to promote resource conservation and environment protection, and an effective strategy for addressing the global environmental challenges as well.

“SAFETY AND STABILITY OF THE INDUSTRIAL CHAIN AND SUPPLY CHAIN ARE THE CORNERSTONE OF SHAPING A NEW DEVELOPMENT PATTERN.”

In the wake of the COVID-19 pandemic, GVCs are facing reconstruction. China’s role in the greening of GVCs has been part and parcel of our discussion and research. With nearly a decade of dedication in exploring the theory and practices of green value chains, China has registered remarkable progress in the fronts of policy study, regional pilots, industry practices, and international cooperations. The Central Economic Work Conference pointed out that “safety and stability of the industrial chain and supply chain are the cornerstone of shaping a new development pattern.”

The new pattern pursues a “dual circulation” framework that involves both domestic and international markets, calling for a smooth loop of production, circulation, distribution and consumption, as well as security and stability of the industry chain and supply chain.

As the world’s largest exporter and second-largest importer of commodities (according to WTO statistics), China is already at the center of GVCs, and has become an important participant and contributor to the greening of GVCs. China’s active efforts in building green value chains, on the one hand, promote corporate technology upgrading and transformation, reduce environmental risks in supply chains, ensure long-term stability of supply chains, cater to the needs of greening domestic production and consumption, and minimize excessive reliance on certain imported commodities; on the other hand, contribute to engaging all participants in the entire value chain towards reducing pollution, carbon emissions, and international environmental footprints of commodity value chains, and promote low-carbon and resilient development globally while meeting the inherent needs of holistic green transformation and high-quality development. Facing new realities, China needs to take a long-term view in promoting the green transformation of GVCs, integrally adopt a systematic planning approach from the top down, and strategically coordinate national campaigns for the greening of value chains.

On account of the current environmental challenges, including climate change, biodiversity conservation and marine pollution, based on the research foundation of green value chains and the development practices of greening GVCs in recent years, the study taps into soft commodities with rising attention, and goes deeper on the greening actions and measures for China’s soft commodity value chains.

The intended purpose is to facilitate the distribution of global environmental benefits, the improvement of environmental quality, and the transmission of environmental behaviors in greening value chains; to reduce environmental risks in value chains holistically by rebuilding mutual trust in commodity trade; and to improve the security and stability of commodity supply, enhance CSR and international competence, and contributing to the exploration of the greening path of GVCs.
The world today is undergoing levels of change unseen in a century, posing tremendous challenges against the human society. In the wake of havoc caused by the COVID-19 pandemic and the frequent occurrence of extreme weather brought about by climate change, the restricted flow of people and logistics, obstruction of production and life, damage to people’s health and social wealth have taken a heavy toll on the proper functioning of global supply chains, triggering the plunging global economy and sluggish post-recovery. Against this backdrop, seeking solutions for curbing the pandemic and tackling climate change, and promoting green transformation and resilient development of value chains, are in the common interests of all mankind and an urgent global agenda. As the world’s largest exporter and second-largest importer, China is already at the center of GVCs with a significant influence. In the special policy study on global green value chains by China Council for International Cooperation on Environment and Development (CCICED), it is reckoned that China’s share in the greening of value chains is of great significance. Promoting the greening of GVCs aligns with China’s strategic goals.

China is entering a new era of development, in which it expects to progress from a fairly well-off society to a new stage of the “beautiful country”, through the journey of the 14th “Five-Year Plan”. China has initiated the “Six Stabilities and Six Securities” policy, the goals of peaking carbon emissions and reaching carbon neutrality, and the “dual circulation” strategy. The country is stepping up efforts on achieving the vision for ecological
civilization, and playing an active part in the agendas of global climate change, biodiversity and sustainable development agendas. In this connection, building green value chains is in accord with the above goals, and a concrete manifesto of the visions.

**Promoting the greening of GVCs contributes to ensuring the security of commodity supply.**

Greening of GVCs can help reduce environmental risks in value chains, promote stable and sustainable production, and mitigate the risk of chain breakage caused by environment and climate issues. It thereby improves long-term stability of commodity supply and prices, caters to the needs of greening domestic production and consumption, minimizes excessive reliance on certain imported commodities, and guarantees the security of value chains.

**Promoting the greening of GVCs safeguards the legality of commodity value chains.**

Laws regarding the production and trade of commodities are quickly strengthening around the world, and the legality review and regulation are also making prompt progress. It is a longstanding principle of China to respect international law and the sovereignty of other countries. Greening value chains would enable Chinese companies to remain the legal compliance of value chains, and contribute to a powerful impetus for all participants across value chains to act in concert.

**Promoting the greening of GVCs makes early preparations for the future market.**

Consumers nowadays have rising concerns about the sustainability of commodities, consequently, the business sustainability standards for retailers and manufacturers are on the rise, and investments in the production and trade of unsustainable commodities are tightening. Building green value chains would help China and Chinese companies to make early preparations and prompt actions, promote corporate technology upgrading and transformation, reduce the international environmental footprints of commodity value chains, and provide sufficient green commodities for the future market.

**Promoting the greening of GVCs effectively elevates China’s international reputation.**

As a major importer and exporter in international trade, China’s clear statement of its goals and action plan for the greening of value chains would further establish the country as a responsible participant, contributor, and leader of global governance.

China could collaborate with other major economies in fulfilling globally agreed goals and targets, promoting the low-carbon and resilient development of global value chains while meeting the inherent needs of holistic green transformation and high-quality development.
"Soft commodities" are raw materials and their derivatives that are grown or produced by the agriculture industries. These materials include plant- and animal-derived materials for use as food, fiber, feed, medicines, cosmetics, detergents, and fuels, such as beef, coffee, cocoa, palm oil, soy, sugar, corn, timber, and pulp, etc.

Soft commodities are linked to human life and are a fundamental factor for human survival and development. However, soft commodity value chains are considered to be critically related to global challenges such as biodiversity loss and climate risks. Research shows that the deforestation and land conversion driven by the production of soft commodities are major contributors to the destruction of global forests, especially tropical forests. Specifically, cattle ranching is the dominant driver of agriculture-driven deforestation, followed by palm oil, soy, cocoa, rubber, pulp, and paper production (see Figure 1).

The dominant producing areas of these soft commodities coincide with the distribution of tropical forests. Extensive and unsustainable production patterns can easily cause the loss and fragmentation of tropical forests, resulting in land degradation, shrinkage of species habitats, biodiversity loss, and man-made reduction of carbon sinks, which in turn exacerbate disease and climate risks.

Since the geographical and natural conditions have a significant impact on the production of soft commodities, the production and consumption take on evident regional differences. Thereby, countries typically rely on GVCs to obtain the required soft commodities. Coordination and reciprocal binding run through all sectors of the value chains, ensuring stable commodity supply and respective benefits.

**FIGURE 1** Deforestation driven by major soft commodities production. Source: WRI, WWF. 2020
Agriculture-driven deforestation per commodity (2001-2015, Goldman et al.)
Amidst the trend and call for addressing global challenges, greening soft commodity value chains rises as a global concern, presenting an increasing number of target commitments and constraints in this regard around the globe.

In 2021, the Kunming Declaration was adopted at the first phase of the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15), announcing China’s initiative to establish the Kunming Biodiversity Fund by investing 1.5 billion yuan; the Glasgow Leaders’ Declaration on Forests and Land Use adopted at COP26 commits to “working collectively to halt and reverse forest loss and land degradation by 2030”; and bilateral documents e.g. the China-US Joint Glasgow Declaration on Enhancing Climate Action in the 2020s and the Joint Communiqué of the Second High-level Environment and Climate Dialogue between China and the EU propose to strengthen conservation and sustainable management of forests, cooperation on sustainable supply chains, and cut down and eliminate illegal deforestation globally.

As a major importer and consumer of some key soft commodities, China could either fulfill and respond to the commitments and goals, or play a pivotal role in greening value chains. Soft commodities offer a starting point for China in building global green value chains, and an action plan for greening China’s soft commodity value chains could be drafted in an effort to promote the joint action of all stakeholders involved in GVCs, and to explore a holistic and systematic path to the green transformation of GVCs.
3 GLOBAL PRACTICES OF GREENING SOFT COMMODITY VALUE CHAINS

3.1 SOFT COMMODITY VALUE CHAINS

The concept of value chain was first introduced by the American scholar Michael E. Porter. Over the past 3 decades, scholars have evolved his theory from corporate value chains that discuss the competitive advantage of a single company to the present GVCs, which involve the processes across different sectors from participation of companies located in different parts of the world, the transformation of goods or services from concept to practice, the delivery to final consumers, to final treatment after use. The value chain of soft commodities from source production to final consumption generally includes sectors of production, processing, trade, distribution, production and consumption of consumer goods, as well as related investment credit and regulation (see Figure 2 and Box 1).

**FIGURE 2** Schematic diagram of soft commodity value chains

- **PRODUCTION & PROCESSING**
  - Local farmers
  - Large companies e.g. Cargill, Bunge, AMD, LDF, AAK

- **TRADE & DISTRIBUTION**
  - Trading companies e.g. Cargill, Bunge, AMD, LDF, COFCO, CHS

- **PRODUCTION OF CONSUMER GOODS**
  - Consumer goods producers e.g. L’Oreal, Mars, Cargill, Bunge, AMD, LDF, Yihai, COFCO

- **INVESTMENT CREDIT**
  - Financial investment institutions e.g. HSBC, Barclays Bank, JPMorgan Chase, Goldman Sachs

- **SALES OF CONSUMER GOODS**
  - Retail companies e.g. Walmart, IKEA, McDonald’s

- **FINAL CONSUMPTION**
  - General consumers

- **REGULATION**
  - Government authorities e.g. agriculture, commerce, transportation, environment, finance
  - Social organizations e.g. environmental protection organizations, industry associations, consumer alliances
BOX 1
EXAMPLES OF SOFT COMMODITY VALUE CHAINS - PALM OIL

PRODUCTION & PROCESSING: Palm trees are mainly grown in tropical regions such as Southeast Asia. Crude palm oil can be obtained from palm pulp by boiling, crushing and pressing, and turned into refined palm oil after removing free fatty acids, natural pigments and odors. Currently, Indonesia and Malaysia are the world’s largest palm oil producer countries, accounting for more than 80% of global production. It is estimated that 40% of the global palm oil is produced by smallholder farmers with a planting area of less than 50 hectares, and the remaining 60% by larger corporate plantations (Dodson A. et al., 2019), e.g. Cargill, and Wilmar plantations in Malaysia and Indonesia.

TRADE & DISTRIBUTION: Except for the part serving consumption of producer countries, a great many crude/refined palm oil is sold worldwide by means of international trade, among which India, China and the European Union (EU) are the major importers. Large multinational food and oil companies like Cargill, Wilmar, AAK, and Bunge hold a dominant position in this segment by virtue of resource strengths in supply, storage and distribution channels.

PRODUCTION OF CONSUMER GOODS: Palm oil, as the type of vegetable oil with the largest production, consumption and international trade in the world, is widely used in the catering, food producing and oleochemical industries, e.g. the production of chocolate, instant noodles, margarine, cosmetics, laundry liquid and biodiesel, etc. Most of the participants in this segment are manufacturers, and representatives of large companies are McDonald’s, Nestlé, Mars, Master Kong, Procter & Gamble, L’Oreal, etc.

SALES OF CONSUMER GOODS: Consumer goods made from palm oil enter the market through retail channels. Participants in this segment include both large retail companies, e.g. Walmart, Carrefour, China Resources Vanguard, and extensive local small/individual retailers.

FINAL CONSUMPTION: Consumer goods made from palm oil are purchased and used by consumers around the world through retail channels.

INVESTMENT CREDIT: The palm oil industry requires huge capital investment from land clearing, planting, to palm oil production, processing and trade. Banks such as Goldman Sachs, JPMorgan Chase, Barclays, HSBC, and China Development Bank are a crucial source of capital for the entire industry.

REGULATION: The government authorities supervise and manage the production, operation and trade of palm oil across the value chain, e.g. the agriculture, forestry and environment authorities of the producer countries, the commercial authorities in charge of international trade, the financial and transportation authorities of relevant countries. Besides, there are a great many NGOs/international organizations that pay close attention to the environmental impact of soft commodities and take concrete actions to advance the industry, e.g. the Roundtable on Sustainable Palm Oil (RSPO), World Wide Fund for Nature (WWF), Tropical Forest Alliance (TFA) at the World Economic Forum.
In terms of spatial distribution, as the production of soft commodities tends to hinge on natural conditions, soft commodity value chains vary greatly by regions. The producing areas are generally concentrated, which are mostly areas with competitive resources, landform and climate (for example, the producing areas of palm oil and coffee gather at the tropical zone between the tropics of Capricorn and Cancer). As part and parcel of daily necessities and basic industrial raw materials, the product consumption market of soft commodities has a global reach, forming a global value chain/network (see Figure 3).

The greening of soft commodity value chains is a market-oriented management approach. The party with trading strengths leverages its influence to manage, regulate and improve the upstream and downstream value chain operations, and incorporates the value of green products and green society into that of soft commodities. In doing so, the value of greening is maximized with improved efficiency and reduced costs.
3.2 THE ROLES AND FUNCTIONS OF KEY STAKEHOLDERS IN GREENING GVCS

Through analysis, the key stakeholders of soft commodity value chains include producers (e.g., plantations, pastures and smallholder farmers), raw material processors/consumer goods producers, traders/distributors, retailers, consumers and government authorities, industry associations, financial institutions, international organizations, NGOs and research institutions. Among them, producers, raw material processors/consumer goods producers, traders/distributors, retailers and consumers are the fundamental factors that constitute the soft commodity value chains.

Government authorities, industry associations, financial institutions, international organizations, NGOs and research institutions exert an indirect influence on soft commodity value chains by exercising each of their administrative authority in carrying out industry self-discipline, and providing financial, technical, intellectual and platform support; and take part in the operation, regulation and management of soft commodity value chains.

The stakeholders engaged in each sector of a soft commodity value chain carry respective roles and functions. They could innovate the greening process, or promote green transformation in the upstream and downstream by leveraging their authority in the market.

Production is the starting point and foundation of soft commodity value chains, and has the greatest environmental impact on the entire value chain. Taking greenhouse gas (GHG) emissions as an example, research shows that more than two-thirds of GHG emissions from the value chains of soy, palm oil and beef come from the CO₂ emissions generated during the process where the primary soil and vegetation are transformed into food production land, about one-tenth comes from farming and breeding, and GHG emissions from production accounts for more than 80% that of the entire value chain (see Figure 4).

Producers (e.g., plantations, pastures and smallholder farmers) are the decision-makers and executors of production greening, and their attitudes, efforts, and benefits from greening are crucial to the greening of production and even the entire value chain. However, hindered by the outdated concepts and insufficient technology and funding, the greening of production relies more on the drive and support of external forces.
Raw material processors/consumer goods producers, traders/distributors and retailers are crucially linked to producers and consumers for the increment of commodity value. In particular, these intermediate steps and their stakeholders have a dominant influence on the greening of the entire value chain of soft commodities.

On the one hand, energy and resource consumption activities such as processing, transportation, packaging, and waste disposal generate environmental impacts and GHG emissions; on the other hand, these stakeholders, with a strong market position, may raise greening demands for the upstream, and supply green products for the downstream, thus leading green transformation of the entire value chain. At present, large multinational food companies dominate the intermediate sectors of soft commodity value chains. Throughout years of operation, the four multinational companies (ADM, Bunge, Cargill, and Louis Dreyfuss) (collectively referred to as ABCD) have mapped out across the planting/production, import and export trade, processing, logistics, consumer goods manufacturing, distribution channels and other segments of soft commodity value chains, playing a leading role in the global soft commodity market.

Consumers are a leading driver of greening soft commodity value chains. The formation and operation of value chains serve the final consumers with desired products and services. The preference for green products at the consumption side fosters a good market for green products and stimulates the upstream for a greater supply.

At the same time, by reducing waste from consumption, improving the utilization efficiency of products, and finding green alternatives, the total demand for soft commodities can be reduced, thereby mitigating part of the climate change consequences indirectly caused by the consumption of soft commodities.
Government authorities, financial institutions and civil societies also play an indispensable role in greening soft commodity value chains. Government authorities perform administration functions by administrative and law enforcement means such as promoting legislation, policy-making, establishing norms, and supervising implementation, setting constraints and guidelines for the greening of value chains. Financial institutions provide financial support for building green value chains by promoting policies, products and services that avail green investment and financing. Civil societies and research institutions e.g. industry associations, international organizations and NGOs organize and promote the value chain players to engage in green practices, and provide technical and regulatory support for building green value chains.

Although different stakeholders assume varied roles and functions in greening soft commodity value chains, it meets the interests of all by strengthening collaboration at all sectors of greening value chains, and by improving the stability and sustainability of the production and supply of soft commodities. Table 1 lists the roles of each sector in green value chains and some common actions for greening value chains.

### Table 1: Actions demos for greening soft commodity value chains

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<th>Sector in value chains</th>
<th>Roles in greening value chains</th>
<th>Action demos for greening GVCs</th>
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<td>Production &amp; processing</td>
<td>» Increasing yield by enhancing per unit area yield instead of expanding arable land&lt;br&gt;» Improving productivity by reducing waste&lt;br&gt;» Facilitating green certification, green procurement, green consumption and green finance by improving collection and release of information</td>
<td>» Production compliance&lt;br&gt;» Circular economy concept, green production capacity building&lt;br&gt;» Promoting the application of sustainable techniques and instruments&lt;br&gt;» Surveying and monitoring plantations&lt;br&gt;» Collecting and disclosing green information of products</td>
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<td>Trade &amp; distribution</td>
<td>» Promoting green production by proposing green procurement requirements&lt;br&gt;» Promoting green consumption with green product supply&lt;br&gt;» Rational control of total demand by reducing waste&lt;br&gt;» Facilitating green certification, green procurement, green consumption and green finance by improving collection and release of information</td>
<td>» Proposing green procurement requirements&lt;br&gt;» Providing and recommending green products to customers&lt;br&gt;» Managing operations with the circular economy concept and reducing waste at this sector&lt;br&gt;» Supporting greening actions at the upstream production side by launching green value chain projects&lt;br&gt;» Promoting clean energy alternatives&lt;br&gt;» Collecting and disclosing green information of commodities</td>
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<tr>
<td>Production of consumer goods</td>
<td>» Promoting upstream greening actions with green procurement&lt;br&gt;» Rational control of total demand by reducing waste&lt;br&gt;» Rational control of total demand by improving the use of raw materials&lt;br&gt;» Facilitating green certification, green procurement, green consumption and green finance by improving collection and release of information</td>
<td>» Managing operations with the circular economy concept, improving the utilization of raw materials and reducing waste&lt;br&gt;» R&amp;D and application of new techniques and formulas&lt;br&gt;» Supporting greening actions at the upstream production side by launching green value chain projects&lt;br&gt;» Promoting clean energy alternatives&lt;br&gt;» Collecting and disclosing green information of products and raw materials</td>
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<tr>
<td>Sector in value chains</td>
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<td>Sales of consumer goods</td>
<td>» Rational control of total demand by reducing waste&lt;br&gt;» Promoting green consumption with green product supply&lt;br&gt;» Facilitating green consumption and green finance by improving collection and release of information</td>
<td>» Green procurement requirements&lt;br&gt;» Managing operations with the circular economy concept and reducing waste at this sector&lt;br&gt;» Providing and recommending green products to customers&lt;br&gt;» Promoting clean energy alternatives&lt;br&gt;» Collecting and disclosing green information of commodities</td>
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<tr>
<td>Final consumption</td>
<td>» Promoting the upstream supply of green products by leveraging the purchasing preference for green products&lt;br&gt;» Rational control of total demand by reducing waste</td>
<td>» Choosing green consumption and certified products&lt;br&gt;» Reducing waste via rational consumption</td>
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<td>Investment credit</td>
<td>» Promoting greening actions with green finance decision-making&lt;br&gt;» Promoting companies to opt for green development patterns in line with green investment and financing standards&lt;br&gt;» Promoting the transparency of value chains by requiring information disclosure</td>
<td>» Incorporating the indicators of value chain/sector greening into the investment target evaluation system&lt;br&gt;» Developing development strategies/plans for green finance&lt;br&gt;» Requiring for value chain greening and information disclosure from investment objects</td>
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<td>Regulation (Government)</td>
<td>» Regulating operations at all sectors by law and on a legal basis&lt;br&gt;» Restricting/stimulating the production side with policies and measures e.g. circular economy, green trade, green certification, and guiding the consumption side&lt;br&gt;» Promoting the greening of GVCs by means of international cooperation&lt;br&gt;» Promoting the social acceptance of green value chains through promotional activities</td>
<td>» Developing policies and regulations e.g. the revised Forest Law, the Circular Economy Promotion Law of the People’s Republic of China for the administration of production licenses, green procurement guidebooks, etc.&lt;br&gt;» Establishing technical systems for due diligence, green information traceability, and green product certification, etc.&lt;br&gt;» Carrying out international cooperation e.g. bilateral and multilateral dialogues, bilateral trade agreements, international assistance projects, multilateral international initiatives/commitments, etc.&lt;br&gt;» Organizing promotional activities to raise public awareness</td>
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<tr>
<td>Regulation (Society)</td>
<td>» Restricting/stimulating the production side with green certification, and guiding the consumption side&lt;br&gt;» Promoting dialogues among stakeholders&lt;br&gt;» Promoting the social acceptance of green value chains through promotional activities</td>
<td>» Proposing industry initiatives and developing industry standards&lt;br&gt;» Organizing dialogues, capacity building and activities alike to promote exchanges and collaboration among stakeholders&lt;br&gt;» Organizing promotional activities to raise public awareness&lt;br&gt;» Consumer education, cultivation of green consumer markets</td>
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</table>
3.3 ANALYSIS OF GREENING PRACTICES OF SOFT COMMODITY VALUE CHAINS

Recent years people have witnessed the rising spillover effect of soft commodity production on the environment and human health. On that account, relevant stakeholders of soft commodity value chains have engaged in a range of practices for greening value chains by leveraging their respective roles and functions. As a result, they have shed light on some conducive experiences and cases.

3.3.1 Government actions

In order to reduce the negative environmental impact brought by soft commodity value chains, especially deforestation at the production sector, government authorities at the production and consumption sides have issued targeted policies and regulations in the fields of agriculture, forestry, manufacturing, trade and finance, and carried out international cooperation.

1) Production side

The governments of soft commodity producer countries have taken measures to promote sustainable production, mainly by strengthening forest conservation legislation, issuing soft commodity production and operation licenses, carrying out product legality certification, launching and participating in sustainable initiatives at home/abroad, and reaching trade agreements with soft commodity consumer countries, etc. Table 2 lists the producer country examples of regulatory measures and policies that support the greening of soft commodity value chains.

**TABLE 2** Producer country examples of regulatory measures and policies that support the greening of soft commodity value chains

<table>
<thead>
<tr>
<th>INDONESIA</th>
<th>EXPORT SOFT COMMODITIES</th>
<th>Palm oil (1st in the world)</th>
</tr>
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</table>

**POLICIES AND MEASURES**

- The Timber Legality Assurance System (locally known as SVLK) verifies the legal supply of timber for export of domestic consumption. Indonesia also has a log export ban.
- Under the Indonesia Sustainable Palm Oil (ISPO) regulations, palm oil plantations must secure certification that they are operating legally.
- In 2019, the Indonesian president announced a permanent moratorium on conversion of primary forests and peat lands.
- Indonesia has a Voluntary Partnership Agreement (VPA) with the EU and is currently the only country that can issue FLEGT licenses to ensure that timber exported to the EU is from legal sources.
- 10 provinces and 36 districts have jurisdictional initiatives to reduce deforestation.
- Introducing timber product traceability systems. Indonesia uses bar codes to track timber from harvest to port and subsequently grants export permits through an online system.

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6 CC/ICED. Global Green Value Chains: China’s Opportunities, Challenges and Paths in the Current Economic Context. 2021
MALAYSIA

EXPORT SOFT COMMODITIES
Palm oil (2nd in the world)

POLICIES AND MEASURES

» Since 2020, palm oil producers must obtain certification under the Malaysian Sustainable Palm Oil standard to comply with MPOB (Licensing) 2005 Regulation No. 15, or face penalties and risk having their licenses suspended or revoked.

» Sabah State has a jurisdictional initiative to reduce deforestation.

BRAZIL

EXPORT SOFT COMMODITIES
Soy (1st in the world); Beef (1st in the world); Coffee (1st in the world)

POLICIES AND MEASURES

» The Forest Code stipulates the maximum land area per farm that can be cleared for agriculture per biome (e.g., 20% in the Amazon, 65-80% in the Cerrado).

» Mato Grosso state has a “Produce, Conserve and Include” strategy to advance a sustainable rural development agenda through implementation of the intensification of commodity production within existing degraded lands, restoration of other degraded lands to forest, and provision of improved extension services and rural credit to producers.

» The Brazilian Central Bank has specific regulations on sustainability due diligence for the financial sector, including requirements that prohibits/prevents loaning to illegally deforested areas, and banks can be fined if they do not comply. A public consultation is currently ongoing to impose new sustainability rules on the rural credit.

COLOMBIA

EXPORT SOFT COMMODITIES
Palm oil (5th in the world); Coffee (3rd in the world)

POLICIES AND MEASURES

» Colombia has signed the Cocoa, Forest & Peace Initiative, which seeks to eliminate cocoa-related deforestation.

» Colombia has zero-deforestation agreements with the palm oil, dairy, meat and cacao industries.
PARAGUAY

**EXPORT SOFT COMMODITIES**
Soy (4th in the world); Beef

**POLICIES AND MEASURES**

» The Forestry Law requires that rural properties over 20 ha in forest zones must maintain 25% as natural forest in addition to riparian forests.

» Paraguay has developed a national traceability system for cattle to ensure meat quality, sanitary standards, the transparency of origin, and chain of custody.

LIBERIA

**EXPORT SOFT COMMODITIES**
Timber

**POLICIES AND MEASURES**

» Liberia has a VPA with the EU to ensure that timber exported to the EU come from legal sources.

CÔTE D’IVOIRE

**EXPORT SOFT COMMODITIES**
Cocoa beans (1st in the world)

**POLICIES AND MEASURES**

» Côte d’Ivoire has a VPA with the EU to ensure that timber exported to the EU come from legal sources.

» Côte d’Ivoire is part of the *Cocoa & Forests Initiative*, which seeks to end deforestation and restore forest areas in cocoa producing areas.

GHANA

**EXPORT SOFT COMMODITIES**
Cocoa beans (2nd in the world)

**POLICIES AND MEASURES**

» Ghana has a VPA with the EU to ensure that timber exported to the EU come from legal sources.

» Ghana is part of the *Cocoa & Forests Initiative*, which seeks to end deforestation and restore forest areas in cocoa producing areas.
### Cameroon
**Export Soft Commodities**
- Cocoa beans (5th in the world)

**Policies and Measures**
- Cameroon has a VPA with the EU to ensure that timber exported to the EU come from legal sources.

### Gabon
**Export Soft Commodities**
- Timber

**Policies and Measures**
- Gabon has made it mandatory for forestry concession holders to achieve FSC certification by 2022.
- Gabon has a VPA with the EU to ensure that timber exported to the EU come from legal sources.

### Central African Republic
**Export Soft Commodities**
- Timber

**Policies and Measures**
- The Central African Republic has a VPA with the EU to ensure that timber exported to the EU come from legal sources.

### Democratic Republic of Congo
**Export Soft Commodities**
- Timber

**Policies and Measures**
- The Democratic Republic of Congo has a VPA with the EU to ensure that timber exported to the EU come from legal sources.

### The Republic of Congo
**Export Soft Commodities**
- Timber

**Policies and Measures**
- The Republic of Congo has a VPA with the EU to ensure that timber exported to the EU come from legal sources.
Indonesia and Malaysia - Palm Oil

Indonesia and Malaysia, the world’s champion and runner-up in the production and export of palm oil, respectively, have taken proactive steps to improve sustainable production. Malaysia limits land use for palm tree cultivation to 6.5 million ha.

Indonesia has announced a moratorium on the development of new palm tree plantations, and performed an audit on the issued palm oil production licenses to ensure minimal impact on the environment. For the sake of sustainable palm oil production, both countries have adopted mandatory certification agreements - Malaysia Sustainable Palm Oil (MSPO) and Indonesia Sustainable Palm Oil (ISPO), respectively, which regulate palm tree farmers and oil refineries towards sustainable development.

It should be noted that, as MSPO and ISPO adopt more relaxed standards compared with the Roundtable on Sustainable Palm Oil (RSPO), which is the prevailing certification system for sustainable palm oil, hence MSPO and ISPO are not mutually recognized with RSPO.

Ghana and Côte d’Ivoire - Cocoa

The smallholder farmers in West Africa contribute to approximately 70% of the world’s cocoa supply. Cocoa, as the primary source of cash income in cocoa producing areas, has also been a driver and direct cause of deforestation. In order to protect local biodiversity and ecosystems, West African governments have allied with the private sector in launching a series of zero-deforestation actions in cocoa commodity chains to curb deforestation in cocoa supply chains. For example, the Cocoa & Forests Initiative signed by Ghana and Côte d’Ivoire (World Cocoa Foundation, 2017), which supports sustainable intensification of cocoa production through public-private sector collaboration, and seeks to improve climate resilience across the industry, contain deforestation and restore the degraded forests. By 2020, the Initiative had cleared 85% of plantation boundaries for 110,000 participating farmers in Ghana and Côte d’Ivoire; more than 1.25 million primary and native fruit trees were distributed in the two countries, as a result, climate resilience of plantations was improved and farmers benefited from diverse sources of income; more than 2 million high-yielding cocoa trees were distributed in Ghana, which helped restore cocoa plantations and enhance productivity; and over 10,000 farmers received training on best practices in forestry and agriculture.

2) Consumption side

The soft commodity consumer countries have taken legislative and regulatory measures in support of the greening of value chains e.g., prohibiting the trade, sale and processing of illegally sourced soft commodities; requiring due diligence of importers for legality/sustainability in commodity sourcing; signing bilateral trade agreements to promote consensus and joint actions on the legality of soft commodities; helping producer countries improve their sustainable productivity and level through bilateral cooperation; developing a green circular economy at home and reducing waste, etc. Table 3 lists the consumer country examples of regulatory measures and policies that support the greening of soft commodity value chains.
The EU Timber Regulation (2010) prohibits the placing of illegally sourced wood products on the European market and requires operators and traders to exercise due diligence to minimize the risk of importing illegally harvested timber.

The EU LULUCF Regulation (2018) requires EU countries to ensure that greenhouse gas emissions from land use, land use change or forestry are balanced by at least an equivalent removal of CO₂ from the atmosphere in the period 2021 to 2030.


The EU Communication on Stepping up EU Action to Protect and Restore the World’s Forests (2019) highlights 5 priorities including one on reducing the footprint of EU consumption on land and encouraging the consumption of products from deforestation-free supply chains in the EU.

In November 2021, the European Commission passed the Proposal for a Regulation on Zero-deforestation Products, which aims to ensure that the products consumed by European citizens in the EU market will not lead to deforestation and forest degradation in the EU and worldwide. The Proposal mandates 6 types of bulk commodities linked to deforestation to comply with the laws and regulations of the producer country before entering the EU market, and shall not be planted on the land from deforestation or forest degradation after December 31, 2020. The Proposal is subject to approval by the European Parliament and the Council of the EU before coming into effect.

France’s Corporate Duty of Vigilance Law (2017) requires large French companies to assess and address the adverse impacts of their activities on people and the planet, by having them publish annual, public vigilance plans.

France’s National Strategy against Imported Deforestation (2017) aims to put an end to deforestation caused by importing unsustainable forest and agricultural products by 2030.

The UK’s Environment Bill (2020) requires due diligence from businesses to ensure deforestation-risk commodities have been produced in line with local laws protecting forests and other natural ecosystems.

**JAPAN**

- Japan’s Clean Wood Act (2016) requires companies to ensure that domestic or imported timber is harvested legally.

**REPUBLIC OF KOREA**

- The Republic of Korea’s Act on the Sustainable Use of Timbers (2017) requires companies to ensure that domestic or imported timber is harvested legally.

**AUSTRALIA**

- Australia’s Illegal Logging Prohibition Act (2012) prohibits the import of wood, pulp and paper products made from timber that is logged illegally, or the processing of raw logs of such timber.

**CHINA**

- The Forest Law (2019) stipulates that “it is forbidden for any organization and individual to purchase, process and transport timber from illegal sources such as knowingly unlawful or wanton.”
- China has introduced forest resource management systems e.g. the forest harvesting quota system, timber logging license, and timber transportation license to ensure the legality of domestic logging, transportation, processing and utilization of timber and timber products.
- China has issued the A Guide on Sustainable Overseas Silviculture by Chinese Enterprises and Guide on Sustainable Management and Utilization of Overseas Forest by Chinese Enterprises to regulate the cooperation of Chinese companies in the sustainable management and utilization of overseas forest.
- China has signed bilateral memorandums of cooperation on combating illegal logging and trade with the EU, the United States, Canada, Australia, Japan, Republic of Korea, Indonesia and other economies and countries that have issued regulations of the kind.
- China assists Cambodia, Gabon, the Republic of Congo, Cameroon and countries with rich forest resources in improving forest governance.
- The Circular Economy Promotion Law (2008) promotes to reduce, reuse and recycle (the 3Rs) in production, circulation and consumption, which helps develop circular economy, improve resource utilization efficiency, protect and improve the environment, and achieve sustainable development.
- China’s Anti-food Waste Law (2021) stipulates that restaurants will face fines if they promote binge-eating on social media, or induce or mislead consumers to ‘order excessive meals and cause obvious waste’.
- The 14th Five-Year Plan for Green Development of Agriculture (2021) proposes that “by 2025, we will remarkably improve our ability to utilize agricultural resources and receive better results in improving habitat environment quality, agricultural ecosystem, supply of green products, and ability in emission reduction and carbon sequestration.”
EU - Palm Oil and Soybeans

As the world’s third largest economy and a hub of well-established developed countries, the EU has massive demand and import of soft commodities. With the increasing attention to CO₂ reduction and tropical forest protection, the EU continues to improve the import access standards for soft commodities and expand its impact on supply chains. These efforts intend to promote “zero-deforestation” production of soft commodities. In 2017, the European Parliament passed a proposal to raise the bar of sustainability standards and strengthen anti-deforestation standards for imported palm oil used for the production of biofuels; The Renewable Energy Directive revised in 2018 aims to phase out first generation biofuels produced from palm oil and food-based crops by 2030, and stipulates strict sustainability and CO₂ emissions standards for imported biofuels; and in 2019, the FTA signed between The European Union and Mercosur states raised demands on sustainable agriculture development and deforestation reduction in Brazil. Through negotiations, both parties agreed to work together to combat global warming under the framework of the Paris Agreement.
3) International multilateral initiatives

The transnational character of soft commodity value chains determines that international cooperation is a prerequisite for the greening of value chains. Apart from the above-mentioned bilateral trade agreements and cooperation, the international community has been exploring ways of dialogue and cooperation involving more countries at stake. It is expected to cut down and halt deforestation through government commitments, consensus and collaboration.

3.3.2 Corporate practices

Compared with direct participants, such as small producers and consumers, companies have more information, capital and technology resources in hand. Either efforts to improve the environment performance of each of their value chains, or joint actions of the whole industry, are rewarding attempts to promote the greening of the entire value chain. In particular, the actions of dominant multinational food companies are of vital importance to building green soft commodity value chains.

New York Declaration on Forests

The New York Declaration on Forests was issued on September 23, 2014, endorsers including 36 national governments, 20 regional governments, 15 indigenous organizations, 53 environmental protection NGOs and 52 transnational companies supported the Declaration to halve the global rate of deforestation by 2020, halt deforestation by 2030, and restore hundreds of millions of hectares of degraded land.

Glasgow Leaders’ Declaration on Forests and Land Use

The Glasgow Leaders’ Declaration on Forests and Land Use signed by 141 countries (economies) at the COP26 2021 commits to working collectively to halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation.
1) Independent practices of companies

Nowadays, industry leaders promote the production-side greening mainly on two fronts. On the one hand, supporting the production-side green transformation, setting up funds in support of sustainable projects, conducting field research and monitoring, improving land productivity, and providing smallholder farmers with high-yielding seedlings, funds and training; on the other hand, carrying out green procurement, strengthening value chain monitoring for improved transparency.

Cargill

With a history spanning 160 years and operations across 68 countries, Cargill is a diversified multinational enterprise group engaged in providing food, agriculture, financial and industrial products and services to the world. As the world’s largest producer of animal nutrition and food products, Cargill has worked for years to improve the deforestation performance of its soy and palm oil supply chains.

In 2014, Cargill signed the New York Declaration on Forests and the Indonesia Palm Oil Commitment. In the same year, a comprehensive sustainable development plan for Cargill’s palm oil supply chains in Indonesia and Malaysia was rolled out. Field research was conducted on local plantations to ensure traceability of the above supply chains.

Purchasing companies

Companies such as Cargill, Golden Agri Resources, Louis Dreyfuss, Mondelez, and Walmart use “Global Forest Watch Pro” to monitor their soft commodity supply chains - starting at the farm - to distinguish green from non-green supplies.

Food giants like Mars, Unilever, and Wilmar use the Palm Risk Tool to identify sources of palm oil that are at “high risk” of being unsustainably grown. COFCO International now tracks its soy supply chains from several Brazilian sources.
2) Joint actions of companies
On account of the status quo of market supply and demand and industry competition, leading companies, while taking independent actions, also take the initiative to cooperate with other industry players to establish pre-competitive partnerships, issue joint commitments, and reduce the risk of vicious competition. They manage to improve traceability and transparency by leveraging high-tech means, thus sharing the cost of greening and promoting the greening of value chains across the board.

SOFT COMMODITIES FORUM

Initiated by the World Business Council for Sustainable Development (WBCSD), the Soft Commodities Forum (SCF) brings together six food giants including AMD, Bunge, Cargill, COFCO International, Glencore and LDC. As a world’s leading international platform for food and agribusiness, SCF is committed to advance a soy supply chain free from land conversion. SCF members pledge to release annual progress reports, eliminate deforestation in global supply chains, gradually improve industry transparency and traceability of key supply chains.

They work with governments, producers, consumers and social organizations in seek of agricultural development solutions that strike a nature-society-economy balance. In 2020, SCF partnered with a high-tech company to track changes in cultivated land and forests by using satellite remote sensing imagery; SCF has launched training for local producers, especially smallholder farmers, to identify their difficulties and challenges, thus seeking grounds for understanding; and SCF guides local farmers to grow soy on degraded ranches instead of deforesting.

ABIOVE

In July 2006, under the pressure from large purchasers such as McDonald’s, the Associação Brasileira das Indústrias de Oleos Vegetais/ the Brazilian Association of Vegetable Oil Industries (ABIOVE) and the Associação Nacional dos Exportadores de Cereais/ National Association of Cereal Exporters (ANEC) announced an industry-wide ban on the purchase of soy grown on deforested land in the Amazon. The moratorium was initially valid till the end of 2014, and has since been in effect. Satellite remote sensing data and independent group research in the following two years show achievements in containing deforestation in the Amazon.

On the other hand, Brazil’s Forest Code allows landowners in the Amazon to clear 20% of the forest for arable land, and the soy grown therefrom do not violate domestic law. Therefore, in recent years, the Brazilian soy planting industry calls for lifting the ban on the purchase of forest-grown soy. In December 2020, 159 international companies including Nestlé, Danone, McDonald’s, Carrefour, and Unilever sent a joint letter titled “SoS Cerrado Manifesto” to ABIOVE, requesting to call off the purchase of soy grown on deforested land starting from December 2020. However, the request was denied by ABIOVE, whose members include ADM, Cargill, Bunge and other international food business giants.
3.3.3 Financial support

The financial sector provides essential financial support for market players, while bearing the profit risks triggered by all kinds of market factors. Upon identifying financial risks brought by deforestation-related operations, financial institutions proactively build environmental and social management frameworks and security policy systems to facilitate investment and financing in the deforestation free value chain, in an effort to drop investment risks and secure returns for investors. Specific measures include developing sustainable development strategies, performing enhanced due diligence and environmental and social risk assessment on investment targets, proposing sustainability/legality verification requirements for products at deforestation risks, and developing project blacklists. According to a report released by BankTrack at the end of 2020, major financial institutions around the world have developed sustainable development/zero-deforestation strategies, and established strict compliance review mechanisms for soft commodity investment and financing.

BARCLAYS BANK

Barclays is the second, third and fourth largest creditors of ADM, JBS and Cargill, respectively, all of which have their supply chains at deforestation risks. Barclays renewed its statement on forestry and palm oil in February 2019, and issued a new statement on forestry and agricultural commodities in August 2020. The statement announced to enhance due diligence on all financial services and clients of Barclays, and called for the analysis of deforestation, biodiversity conservation and the impacts on protected areas by environmental and social risk criteria. Barclays expressed “being reluctant” to provide financial services to forestry, pulp and paper or palm oil companies engaged in activities such as illegal logging or trade, and the use of illegal or uncontrolled fires in forestry or plantation operations.

JPMORGAN CHASE

JPMorgan Chase is among the top five global creditors in the soft commodities industry. During 2014-2020, JPMorgan Chase has invested roughly $6.2 billion in companies at deforestation risks, e.g. Suzano, Cargill, ADM, palm oil companies Wilmar and Olam, and beef suppliers JBS, Minerva and Marfrig. JPMorgan Chase has outlined the sustainable development strategy in its Environmental and Social Policy Framework. The Framework covers palm oil, soy and timber, and calls for an “enhanced review” of these sectors, including the adoption of certification mechanisms. The compliance of JPMorgan Chase focuses on two aspects. First, clients are required to provide RSPO, RTRS and FSC certificates pertaining to palm oil, soy and timber products; second, JPMorgan Chase has a list of prohibited activities, claiming it will not provide financing where the proceeds will be used to develop within UNESCO World Heritage sites, or to clients where there is evidence of illegal logging.

Apart from each of their sustainable management measures, the financial sector has also launched industry initiatives towards ecological conservation and sustainable development, which are similar to the joint actions of companies. It has made attempts on joint actions with the consumer goods production industry, with the hope of expanding impact through concerted efforts.
SOFT COMMODITIES COMPACT

In 2014, BEI and the Consumer Goods Forum (CFG) initiated the Soft Commodities Compact (SCC), under which the consumer goods industry and banks aim to support the goal of ‘zero net deforestation’ for the participating companies in their commodities supply chains of soy, palm oil, beef, pulp, paper and timber by 2020.

Since its launch, SCC has been adopted by 12 banks, including seven members of the BEI (Barclays, BNP Paribas, Deutsche Bank, Lloyds Banking Group, NatWest Group, Santander and Standard Chartered) and five nonmembers (JPMorgan Chase, Rabobank, Société Générale, UBS and Westpac). All except JPMorgan Chase are signatories to the UNEP-FI-backed Principles for Responsible Banking (PRBs). These commit signatories to “align their business strategies” with both the Paris Agreement and the Sustainable Development Goals (SDGs), the latter of which include the goal to “halt deforestation and restore degraded forests” by 2020.

In 2021, BankTrack analyzed and compared the 12 banks’ policies and commitments under the SCC, and found that “six years of the SCC have sadly failed to contribute towards the objective of ‘zero net deforestation’, and have shown that a reliance on certification schemes as the primary means to get there, are inadequate to the task of ensuring banks provide finance in a manner that protects the world’s forests”.

JPMORGAN CHASE

During the 15th Conference of the Parties to the United Nations Convention on Biological Diversity held in October 2021, 36 Chinese banking financial institutions and 24 foreign banks and international organizations, made the Joint Declaration of Banking Sector to Support Biodiversity Conservation (hereinafter referred to as the “Declaration”). With a focus on strengthening the banking sector’s support for biodiversity conservation, the Declaration proposed to put the best efforts in seven areas. Specifically, to:

1. formulate “biodiversity strategy”, set up the goals, roadmaps and action plans for banks to support biodiversity, provide eco-friendly financial services, and contribute to a win-win of economic growth and environmental protection;

2. strengthen “biodiversity risk management”, enhance biodiversity conservation and support and avoid actions that harm biodiversity while carrying financial and investing activities;

3. establish “biodiversity preferences”, incorporate biodiversity protection into the scope of the green finance framework, and steer greater financial resources towards biodiversity protection and nature-based solutions;

4. increase “biodiversity investment and innovation”, promote value realization of ecologically friendly products, and actively provide comprehensive financial services for biodiversity conservation;

5. enhance “biodiversity disclosure”, strengthen the interbank sharing and exchange of biodiversity data and information, timely disclose the policies of prohibiting or supporting financing, perform classification and screening of financing, and provide updates;

6. improve “biodiversity performance”, support and strengthen publicity through multiple channels to raise awareness on biodiversity and upskill expertise;

7. promote “biodiversity cooperation”, to bring a financial rigor to biodiversity protection and build an eco-friendly image for banks through engagement with civil societies and media.
3.3.4 Social engagement

Nowadays, social forces and non-governmental cooperation play an increasingly dominant role in global environment governance. In this context, international organizations and NGOs are essential in the supervision and support of greening soft commodity value chains. By carrying out voluntary certification, launching industry initiatives and developing industry standards, social organizations promote the practices of greening value chains in depth and facilitate exchanges and cooperation among all stakeholders. The mainstream soft commodity sustainability certification standards include FSC (Forest Stewardship Council), Roundtable on Sustainable Palm Oil (RSPO), Malaysian Sustainable Palm Oil (MSPO), Indonesian Sustainable Palm Oil (ISPO), Roundtable on Responsible Soy (RTRS), Global Roundtable for Sustainable Beef (GRSB), Roundtable on Sustainable Biomaterials (RSB), Sustainable Agriculture Network (SAN), International Sustainability & Carbon Certification (ISCC), and High Carbon Stock (HCS).

**ROUNDTABLE ON SUSTAINABLE PALM OIL**

The Roundtable on Sustainable Palm Oil (RSPO) was established in 2004 with the objective of promoting the growth and use of sustainable oil palm products through credible global standards and multi-stakeholder governance. Among palm oil certification mechanisms, RSPO by far has the widest coverage and the highest recognition. The RSPO has more than 2,900 members worldwide who come from the 7 sectors of the palm oil industry: oil palm producers, processors or traders, consumer goods manufacturers, retailers, banks/investors, and environmental and social NGOs. RSPO unites stakeholders to develop and implement global standards for sustainable palm oil, and its certification system has been widely accepted around the world. At present, the proportion of RSPO-certified palm oil accounts for about 21% of the global production. With a small global supply of sustainable palm oil, the buying demand falls short. With 60% of the global palm oil produced by large corporate plantations, the recognition of sustainable palm oil certification in large-scale production systems still needs to be improved.

**CHINA’S REGULATIONS ON GREEN TRADE OF MEAT INDUSTRY**

In 2017, the China Meat Association (CMA) and 64 industry leaders as members of the International Meat Secretariat jointly signed the Declaration on Sustainable Development of China’s Meat Industry; through cooperation in the “zero deforestation” pilot meat program and the green trade production and marketing project in South America, CMA and the World Wide Fund for Nature (WWF) jointly developed the Guidelines on Green Trade of Sustainable Meat in China, which was upgraded to a social organization standard Regulations on Green Trade of Meat Industry (“the Regulations” in short) in May 2021. The Regulations aims to promote and guide companies to purchase and sell meat products produced in a deforestation-free manner, promote sustainable development of the meat industry, and mitigate the global impact of deforestation resulted from related production activities. It stipulates to prevent and halt damage to the ecological environment and human health caused by trade activities; reject selling or purchasing products from “deforestation-intensive” areas with related questions; achieve product traceability; and pledge to halt production associated with deforestation.
Amidst the changes in the international political and economic landscape, the global greening course is speeding up. From the Sustainable Development Goals (SDGs) adopted by the UN in 2015 to the Paris Agreement enacted in 2016, the consensus on ecological conservation and green sustainable development has been on the rise. In contrast to these trends and ambitious visions and goals, the current greening progress of soft commodity GVCs has been floundering.

On the one hand, there is a gap between the appeals of value chain stakeholders and the trend of greening, as a result, consensus on green value chains from the perspective of global sustainable development governance has not yet been built. In terms of producer countries, their governments expect to address unemployment, seek economic growth, and improve people’s livelihood by relying on the production and trade of soft commodities; in terms of consumer countries, soft commodities are the strategic resources for securing the supply of food and raw materials, and promoting economic growth; in terms of soft commodity producers, the pursuit of low cost and high yield, the increase of competence and revenues are their main goals; in terms of purchasers, the top priority is to control procurement costs, thereby improving competitive strength and ensuring safe and stable value chains; in terms of consumers, obtaining better and more stable supply of goods and services with high cost performance represents their essential need; and in terms of
financial institutions, reducing risks and improving returns are their expectation. With regard to the concerns of value chain stakeholders, greening value chains takes up a humble part. In addition, the external environment costs for greening value chains will inevitably increase the total cost. The gaming at all sectors for cost distribution and consumption goes against gathering consensus of stakeholders.

“THERE IS A REMARKABLE GAP BETWEEN THE VALUE CHAIN GREENING ACTIONS AND THE DEMANDS FOR FULFILLING GOALS, MAKING IT DIFFICULT TO ACHIEVE THE DESIRED EFFECT”

On the other hand, there is a remarkable gap between the value chain greening actions and the demands for fulfilling goals, making it difficult to achieve the desired effect. In terms of practice of the value chain players, the production-side staff and final consumers have weak awareness of greening value chains, with insufficient green investment at each sector, and a lack of credible product certification standards and information traceability systems to support the development of green procurement.

With the lack of an assessment system and a market incentive mechanism that avail the communication of greening value chains requirements and willingness, and a rational and effective green cost sharing mechanism, the industry competition has made a vicious turn. In terms of government administration, the policy requirements of authorities are uncoordinated.

Crippled by capital, technology and manpower, the execution force of greening actions is weak, the coordination between public and private sectors runs short, and the performance assessment of the greening measures and the reliability of results are unsatisfactory.

What’s more, the transparency of administration and evaluation needs to be improved, the international commitments lack a binding effect, and the international standards call for extensive recognition and acceptance. In terms of industry and public supervision, financial institutions generally lack an understanding of environmental risk control and support for green value chain policies. Besides, as social organizations have weak ties with key stakeholders, their influence is limited.

4.2 THE PENDING PROBLEMS IN GREENING SOFT COMMODITY VALUE CHAINS

In light of the practical challenges and cases, it can be seen that the greening of soft commodity value chains is impeded by several common and systematic problems.
1) Incongruous understanding among stakeholders
At present, building green soft commodity value chains has yet to find common grounds. The stakeholders lack consensus on the reasons and significance of greening value chains. They have doubts and concerns about the potential risks and impacts of the greening measures, and hold differences in the cost allocation and responsibility sharing arising therefrom.

2) Incomplete systems
The current green value chain practices lack unified guiding principles and guidelines on action, with imperfect laws, regulations and policy systems, uncoordinated communication and interest division among stakeholders, lack of consistent policies and actions, and a lack of a widely-accepted green cost sharing mechanism and a market incentive mechanism that avail green value chains.

3) Insufficient technical support
The backward development and application of green technologies and management approaches at production, consumption and other sectors fall short of meeting the green transformation demands of the entire value chain. There is a lack of internationally recognized standards of product sustainability certification and sustainable management, the legality and green information traceability systems of soft commodities are incomplete, and the transparency of GVCs is unsatisfactory. The financial instruments and products that guide and support the development of green soft commodity value chains are in deficit.

4) Inadequate greening awareness and capacity of the industry and the public
The public awareness of the greening of value chains and the social initiative to promote green transformation are inadequate. Managers and staffs in related industries lack the knowledge, techniques and approaches of green value chain management. Consumers have low acceptance of green product certification, and it is difficult for them to distinguish from sustainable products.

5) International consensus and actions need progress
There exist differences in the understanding and identification of the legality and greening of soft commodities among governments, as well as insufficient consensus on the timing, approaches, goals and steps of taking concrete greening actions. Hitherto, although stakeholders have pledged international commitments on green development, the specific paths and cooperation measures to put these goals and commitments in place remain unclear.

4.3 THE DESIGN IDEOLOGY OF THE ACTION PLAN FOR GREENING CHINA’S SOFT COMMODITY VALUE CHAINS

In view of the pending problems in greening soft commodity value chains, and in light of promoting the holistic and systematic green transformation of the entire value chain, it is imperative to reiterate the central task of “building systems, mechanisms and standards, strengthening capacity, promotion and cooperation” carried out under the shared ideology, principles and goals; to launch joint actions on greening value chains with a larger scope and in a more concerted and coordinated manner; and to seek breakthroughs and total solutions to accelerate the building of global green value chains.

The framework and design ideology of the action plan are shown in Table 4.
<table>
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<tr>
<th>FRAMEWORK</th>
<th>DESIGN IDEOLOGY</th>
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| GUIDING PHILOSOPHY            | » Adhering to Chinese President Xi Jinping’s thoughts on governance and development, e.g. socialism with Chinese characteristics, ecological civilization, and a community with a shared future for mankind  
» Strengthening coordination with national strategies and policies e.g. the "14th Five-Year Plan", "the goals of peaking carbon emissions by 2030 and reaching carbon neutrality by 2060", “Beautiful China”, and green agriculture  
» Promoting environmental protection and sustainable development of mankind towards addressing climate change and protecting biodiversity  
» Performing international commitments, e.g. the Paris Agreement, the Glasgow Leaders’ Declaration, the China-US Joint Glasgow Declaration on Enhancing Climate Action in the 2020s, the High-level Environment and Climate Dialogue between China and the EU |
| FUNDAMENTAL PRINCIPLES        | » Stability is the top priority. Ensuring food security and protecting the rights and interests of development  
» Supporting major policies e.g. the “dual circulation” framework, the Green Belt and Road Initiative, and green trade development  
» Upholding international consultation and dialogue on the basis of mutual respect for sovereignty, independence, and non-interference in internal affairs |
| VISIONS AND GOALS             | » Coordinating with China’s major strategic goals for fulfilling the "14th Five-Year Plan", “Beautiful China”, green agriculture strategy and “the goals of peaking carbon emissions by 2030 and reaching carbon neutrality by 2060”  
» Making clear the goals, and ensuring their rationality and feasibility  
» Mapping out short-term (3-5 years), mid-term (10 years) and long-term (30-50 years) goals by phases and steps |
| ACTION STRATEGIES             | » Focusing on key sectors and making breakthroughs with targeted approaches  
» Playing the leading role of key stakeholders for coordinated progress  
» Creating a green social environment through administrative supervision and market incentives  
» Seeking steady progress of greening with holistic planning and step-by-step practice |
| PRIORITIES                    | » Setting priorities based on practical experience and realities  
» Seeing to that the expected outcomes of priorities live up to the visions and goals  
» Refining priority actions and clarifying the division of labor |
| SAFEGUARDS                    | » Strengthening leadership and team building  
» Strengthening policy coordination and support  
» Strengthening innovation in technologies and models |
5 RECOMMENDATIONS ON THE FRAMEWORK OF THE ACTION PLAN FOR GREENING CHINA’S SOFT COMMODITY VALUE CHAINS

5.1 GUIDING PHILOSOPHY

The action plan shall be drafted in light of President Xi Jinping’s thoughts on socialism with Chinese characteristics, building a community with a shared future for mankind, and ecological civilization. With a foothold in the new era and pattern of development, the fostering of a unified national market shall be advanced.

Towards achieving SDGs, “the goals of peaking carbon emissions by 2030 and reaching carbon neutrality by 2060”, addressing climate change and protecting biodiversity, and under the premise of securing food supply and satisfying people’s nutrition and health needs, the action plan shall promote holistic and systematic green transformation of China’s soft commodity value chains; strengthen top-level design and coordination; improve the management system, and the incentive and restraint mechanism; strengthen technology capacity and build a practice and demonstration platform; promote international exchanges and cooperation; build a safe, stable, green and resilient value chain system; and deliver China’s green development commitments to the world, contributing China’s strength for building green soft commodity GVCs.

“WITH A FOOTHOLD IN THE NEW ERA AND PATTERN OF DEVELOPMENT, THE FOSTERING OF A UNIFIED NATIONAL MARKET SHALL BE ADVANCED.”
5.2 BASIC PRINCIPLES

Ensuring food security and economic stability as the top priority. Under the premise of ensuring secure supply of food and soft commodities that are related to national economy and people’s livelihood, and by taking into account the concerns of stakeholders, green soft commodity value chains shall be built in a scientific, orderly, and steady manner.

Promoting diversified and total-factor cooperation with a holistic view and synergy. The ties with major strategies and guidelines shall be strengthened to promote synergy for multiple agendas and goals. The guiding role of government policy and market mechanism shall be leveraged to stimulate the sense of responsibility and enthusiasm of the players in the value chains, and to improve engagement and capacity of building green soft commodity value chains.

Contributing to global sustainable development in the spirit of equal consultation, mutual benefit and win-win result. Under the premise of respecting the sovereignty and rights to development of all countries, and in line with the principles of “common but differentiated responsibilities” and “non-interference in internal affairs”, the action plan shall promote dialogues and exchanges on bilateral and multilateral policies and cooperation in pilot projects, help less developed countries and regions improve management and technology capacity of green value chains, avoid trade barriers and discrimination against disadvantaged groups, and promote the greening of GVCs.

5.3 VISIONS AND GOALS

By 2025, a management and coordination system for green soft commodity value chains shall be put in place; the legal framework and policy standards for the management of key green soft commodity value chains developed and improved; the development and application of core technologies (corporate green procurement toolkit, traceability technology, information disclosure mechanism and platform, financial instruments) of green value chains progressed; and a number of management pilots of key green soft commodity value chains launched, forming typical case experiences and preliminary consensus on international actions for greening soft commodity value chains. By 2035, a management system for green soft commodity value chains shall be basically established; the key technical huddles at all sectors of the value chains cleared; the key green soft commodity value chains basically formed; the international cooperation actions implemented; and the goal to halt and reverse forest loss and land degradation fulfilled. By 2060, a complete management system for green soft commodity value chains shall be fostered, and carbon neutrality of soft commodity GVCs achieved.

“The action plan shall promote dialogues and exchanges on bilateral and multilateral policies and cooperation in pilot projects”
5.4 ACTION STRATEGIES

1) Focusing on key sectors and making breakthroughs with targeted approaches
With a focus on the three key sectors - production, trade and consumption in soft commodity value chains and their characteristics and key points, a feasible action plan shall be drafted targeting at the pain points and priorities in the greening process. In terms of production, to help major producer countries achieve green transformation through international cooperation, and by means of improving the use and approaches of processing and consumption of soft commodities at home, increasing domestic supply and reducing dependence on imports.

In terms of trade, to establish and improve a due diligence system for soft commodity imports, reinforce demands on legal production, and strengthen the building of a green information traceability system for soft commodities. In terms of consumption, to carry out education on green consumption for all, promote green product certification, advocate healthy diet and reduce waste.

2) Playing the leading role of key stakeholders for a coordinated progress
The key stakeholders in soft commodity value chains with the largest influence and right to speak shall be leveraged. It is imperative to develop targeted policies and measures that stimulate the green transformation initiative of large food trade and processing companies, and guide State-Owned Enterprises to play a demonstration role in the greening of value chains; support upstream and downstream green practices led by leading companies; and promote the greening of the entire value chain by promoting the successful experience of key stakeholders.

3) Creating a green social environment through administrative supervision and market incentives
It is intrinsic to strengthen institutional constraints, stimulate market vitality, and set the sector for building green soft commodity value chains; set up target accountability, evaluation, reward and punishment systems for the greening of key soft commodity value chains; strengthen the legal protection for greening at key sectors, improve law enforcement, and consolidate regulation in key areas; improve the market mechanism, steer social engagement, renew policies of green finance, and strengthen incentives of the market and investment on the greening of the entire value chain.

4) Seeking steady progress of greening value chains with holistic planning and step-by-step practice
It is essential to take a long-term view and put into practice. By combining the top-level design and holistic planning with the practical foundation and working conditions, step-by-step goals and tasks shall be drafted in a scientific approach, and the policies, measures and actions gradually practiced. The resources and enthusiasm of stakeholders shall be mobilized to the best, and the bottlenecks of greening value chains addressed via coordination of authorities, regions, and stakeholders, in this way promoting the long-term running of green value chains.

“IT IS IMPERATIVE TO DEVELOP TARGETED POLICIES AND MEASURES THAT STIMULATE THE GREEN TRANSFORMATION INITIATIVE OF LARGE FOOD TRADE AND PROCESSING COMPANIES AND GUIDE STATE-OWNED ENTERPRISES TO PLAY A DEMONSTRATION ROLE IN THE GREENING OF VALUE CHAINS”
5.5 PRIORITIES

**PRIORITY 1:**
Establishing a domestic management system for green soft commodity value chains

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**ACTION 1:** Establishing a management and coordination mechanism for green soft commodity value chains.

A management and coordination mechanism covering stakeholders of the entire value chain shall be established, which comprises a coordination mechanism among government authorities and a society-wide public-private communication and cooperation mechanism.

The main constituents of the mechanism are as follows.

» **INTER-MINISTERIAL COORDINATION COMMITTEE:** It is composed of relevant ministries and commissions to review and approve China’s green value chain strategy, policies, plans and roadmaps, and organize and coordinate amongst members to advance work tasks. The members promote green soft commodity value chains by their division of responsibilities [see Table 5].

» **STEERING COMMITTEE:** Each member ministry under the Inter-ministerial Coordination Committee should appoint relevant departments/bureaus and responsible personnel as liaisons to form the Steering Committee as a daily liaison mechanism and to supervise the implementation of tasks.

» **ADVISORY BOARD:** The experts and scholars from relevant research institutes, industries, companies and social organizations will form the Advisory Board under the guidance of the Steering Committee, and to provide intellectual, technical, financial, and project support for the work of green value chains.

» **GLOBAL GREEN VALUE CHAIN PARTNERSHIPS:** The partnerships engage stakeholders of soft commodity value chains at home and abroad, fostering a platform for equal dialogues among companies, financial institutions, regulators, social organizations and research institutes in the upper, middle and lower reaches of value chains. The aim is to seek maximized interests of all stakeholders and promote the practice of value chain greenings solutions.
### TABLE 5 Division of responsibilities for authorities in promoting green value chains

<table>
<thead>
<tr>
<th>AUTHORITY</th>
<th>DIVISION OF RESPONSIBILITIES</th>
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| **Ministry of Ecology and Environment** | » To establish and improve the basic system for ecological environment; supervise the implementation of national emission reduction targets, environmental pollution prevention and control, and ecological environment access;  
» organize, guide and coordinate ecological environment promotion and education;  
» develop and organize the implementation of the promotion and education guidelines of ecological environment protection;  
» promote social organizations and the public to participate in ecological environment protection, etc.                                                                                             |
| **Ministry of Commerce**        | » To develop development strategies and policies for domestic and foreign trade and international economic cooperation;  
» develop laws and regulations on domestic and foreign trade, foreign investment, foreign assistance, foreign investment and foreign economic cooperation, as well as internal regulations;  
» propose opinions on the coherence between China’s economic and trade regulations and international economic and trade treaties and agreements;  
» research on economic globalization, regional economic cooperation, the development trend of modern circulation approaches and circulation system reform, and propose suggestions, etc. |
| **National Development and Reform Commission** | » To develop and organize the implementation of national economic and social development strategies, medium- and long-term plans and annual plans;  
» promote the overall goal of high-quality development; take the lead in promoting supply-side structural reform and the Belt and Road Initiative;  
» take charge of gross balance and macro-control of major commodities; promote the implementation of sustainable development strategies, and the building and reform of ecological civilization;  
» coordinate ecological environment protection and restoration, energy and resource conservation and comprehensive utilization, etc.                                                                                       |
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<tr>
<th>AUTHORITY</th>
<th>DIVISION OF RESPONSIBILITIES</th>
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<tr>
<td>Ministry of Finance</td>
<td>» To develop fiscal and taxation development strategies, plans, policies and reform plans and organize the implementation;</td>
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<td></td>
<td>» develop laws, administrative laws and regulations on finance, financial and accounting management, as well as internal regulations, and supervise the implementation;</td>
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<td></td>
<td>» organize the develop tax laws, administrative laws and regulations, regulations for implementation, tax policy adjustment plans, propose tariff and import tax policies;</td>
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<td></td>
<td>» organize the drafting of tax-free industry policies and regulations;</td>
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<td></td>
<td>» handle and supervise the economic growth expenditure of the central government, financial appropriations for central government investment projects;</td>
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<td></td>
<td>» and participate in the drafting of central infrastructure investment policies, etc.</td>
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<tr>
<td>Ministry of Agriculture and Rural Affairs</td>
<td>» To coordinate research and organize the implementation of development strategies, medium- and long-term plans, and major policies for issues relating to agriculture, rural areas and farmers; undertake agricultural statistics and agricultural and rural informatization work;</td>
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<td>» guide the production of agricultural products such as grains; regulate the quality and safety of agricultural products, and organize the quality and safety testing, tracing and risk assessment;</td>
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<td></td>
<td>» guide the protection and management of agricultural land, fishery waters and agricultural biological species resources;</td>
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<td></td>
<td>» be responsible for the protection of aquatic wild animals and plants, quality protection of cultivated land and permanent basic farmland; and guide the work of agricultural and rural talents, etc.</td>
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<tr>
<td>Ministry of Industry and Information Technology</td>
<td>» To develop and organize the implementation of policies for promoting energy conservation, comprehensive utilization of resources, and cleaner production in industry and IT;</td>
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<td>» promote institutional reform and administrative innovation in industry and IT;</td>
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<td></td>
<td>» strengthen the guiding and constraining role of strategic planning, policies and standards for the development of industry and IT;</td>
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<tr>
<td></td>
<td>» and accelerate the integrated development of industry and IT.</td>
</tr>
<tr>
<td>National Forestry and Grassland Administration</td>
<td>» To supervise forestry and grassland and their ecological conservation and restoration;</td>
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<tr>
<td></td>
<td>» organize the dynamic monitoring and evaluation of forest resources;</td>
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<tr>
<td></td>
<td>» be responsible for science and technology, education and foreign affairs related to forestry and grassland; and guide the building of national forestry and grassland talent pool.</td>
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<tr>
<td>Authority</td>
<td>Division of Responsibilities</td>
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| State Administration for Market Regulation | » To take charge of holistic market regulation and management; develop relevant laws and regulations, rules, policies and standards on market regulation and management;  
» organize the implementation of strategies of building a country of strong capacity on quality, food safety and standardization, and relevant plans;  
» regulate market order, and foster an honest and trustworthy market with fair competition;  
» regulate market trade, online commodity trade and related services by law;  
» organize and guide the investigation and punishment of violations of price charges, unfair competition, illegal direct selling, pyramid selling, infringement of trademarks, patents, intellectual property rights, and the manufacture and sale of counterfeit and shoddy products;  
» guide the development of the advertising industry, regulate advertising activities;  
» guide the investigation and punishment of unlicensed production and operation and related unlicensed activities;  
» guide the China Consumers Association to carry out consumer rights protection;  
» build food safety emergency system, organize and guide the emergency response, investigation and handling of major food safety incidents;  
» establish and improve the direct reporting system for important information on food safety; undertake the daily work of the Food Safety Commission of the State Council;  
» supervise food safety, establish a regulation and inspection system, and a hidden danger identification and governance mechanism that cover the entire process of food production, circulation and consumption, and organize the implementation;  
» prevent regional and systematic food safety risks; promote the establishment of an accountability mechanism for food producers and operators;  
» improve the food safety traceability system;  
» organize the implementation of food safety sampling inspection, risk monitoring, verification and disposal, risk early warning, and risk communication;  
» and organize the registration, filing and regulation of food for special purposes. |
| China Banking and Insurance Regulatory Commission | » To implement unified regulation and management of the national banking and insurance industries in accordance with laws and regulations;  
» participate in the drafting of strategic plans for the reform and development of the financial sector, major laws and regulations on the banking and insurance sectors, and the basic systems for prudential regulation and financial consumer protection; and be responsible for the compilation of unified national banking and insurance regulatory data reports, etc. |
| General Administration of Customs | » To be responsible for national customs work; develop customs (including entry-exit inspection and quarantine) policies, laws and regulations;  
» develop customs plans, department rules, and technical specifications; collect and manage import and export duties and taxes;  
» take the lead in external negotiations on multilateral and bilateral rules of origin;  
» develop rules of origin for import and export commodities;  
» and organize and implement visa administration by law, etc. |
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<tr>
<th>Authority</th>
<th>Division of Responsibilities</th>
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| The People’s Bank of China | » To develop the reform, opening-up and development plans, as well as major laws and regulations of the financial sector; take the lead in planning for the building of major financial infrastructure and coordinating the implementation and regulation;  
» promote the reform and interconnectivity of financial infrastructure, and coordinate Internet financial regulation; and develop informatization development plans of the financial sector, etc. |
| China Securities Regulatory Commission | » To study and develop policies and development plans for the securities and futures market; approve the listing of corporate bonds;  
» supervise the transactions of listed treasury bonds and corporate bonds; supervise the securities market behavior of listed companies and their shareholders who shall perform relevant obligations by laws and regulations, etc. |
| Standardization Administration of the People’s Republic of China | » To issue national standard plans, approve the release of national standards, review and release major documents e.g. standardization policies, management systems, plans, announcements;  
» issue circulars on mandatory national standards;  
» coordinate, guide and supervise work related to industry, local, group, and corporate standards;  
» participate in ISO, International Electro Technical Commission (IEC) and other international or regional standardization organizations on behalf of China;  
» and undertake the signing of international cooperation agreements, as well as the daily work of the standardization coordination mechanism under the State Council. |
| Certification and Accreditation Administration of the People’s Republic of China | » To take charge of holistic market regulation and management, registration of market entities and establishment of an information disclosure and sharing mechanism; organize market regulation and law enforcement, enforce the Anti-Monopoly Law, and regulate the market order;  
» organize the strategy implementation of building a country strong on quality; and be responsible for the quality and safety of industrial products, food safety, regulation of special equipment safety, unified management of measurement criteria, inspection and testing, certification and accreditation, etc. |
The content related to soft commodity value chains in the available policies and regulations (e.g. green agriculture, circular economy) shall be collated, followed by revising inconsistencies among policies and regulations, and renewing based on the current development needs of green soft commodity value chains.

1. Developing and publishing the Detailed Rules for the Implementation of the Forest Law, and guidelines for green value chains of specific soft commodities.
2. Issuing a ban on the import of soft commodities from illegal sources.
3. Improving the relevant legal requirements for due diligence, and making due diligence mandatory for importers of key soft commodities with environmental risks.
4. Establishing an information disclosure mechanism and norms of green value chains.
5. Developing tax policies that are conducive to the greening of value chains, paying special attention to incentives and support for micro, small and medium-sized enterprises and small producers.
6. Developing financial policies for green value chains; revising the Green Credits Guidelines and Green Credit Statistical System; and updating the Guidance on Promoting High-quality Development of the Banking and Insurance Industry and Plans to strengthen data disclosure requirements.
7. Developing trade policies that encourage the development of green value chains.

ACTION 3: Developing national/local standards for green soft commodity value chains.

1. Developing due diligence norms, clarifying the content of due diligence and qualifications of the executor.
2. On account of the characteristics of products and industries, developing management and evaluation standards for green value chains of industries, strengthening consistency with international standards, and providing a basis for relevant stakeholders to evaluate green value chains.
3. Developing sustainability standards for specific soft commodities, clarifying legal requirements, and enabling importers, consumers, investors and regulators to distinguish green and sustainable commodities from those that fail to meet standards, so as to provide a basis for the management of green value chains.
PRIORITY 2: Establishing a technical support system for the management of green soft commodity value chains

ACTION 4: Establishing and improving a soft commodity information traceability system.

1. Strengthening the application and research of satellite remote sensing, big data, cloud computing, AI and other advanced digital technologies in the information traceability and real-time monitoring and early warning of green value chains; and developing guidelines on the information traceability system that covers the identification of the origin of soft commodities, and information collection, collation, management, analysis, query and other sectors of the greening of value chains.

2. Establishing a unified database and promoting its application, promoting the disclosure of green value chain information, and enhancing the transparency of the legality and sustainability of commodity sources.

3. Drawing reference from the established practices of key commodity traceability (e.g. express and logistics transportation) systems and the COVID-19 pandemic surveillance and traceability system, which has been rapidly established and improved in recent years, and strengthening the building of green traceability systems for other soft commodities and products.

ACTION 5: Establishing and promoting a certification system for green soft commodities.

1. Encouraging voluntary certification for green soft commodities, exploring to establish a voluntary certification standard system for green soft commodities, and promoting the consistency with the laws and regulations of the producer countries and the international mainstream certifications.

2. Exploring to establish a market-oriented operation mechanism for green soft commodity certification, design a rational and feasible certification cost sharing mechanism, regulate and promote certification marks, and clarify the qualifications of certification bodies.

ACTION 6: Developing innovative financial instruments that support green value chains.

1. Promoting research on the sustainability policy framework of soft commodities within financial institutions, incorporating green value chain concepts into businesses, project selecting principles, project investment identification and evaluation, and project planning; developing bond standards that are conducive to green value chains, and promoting the practice of green value chains.

2. Strengthening the coherence between the building of green soft commodity value chains and green trade and investment by leveraging the Partnership of Biodiversity and the Finance [PBF], the World Bank, the Asian Infrastructure Investment Bank (AIIB), the UN Environment Programme and other platforms.

3. Promoting the design and development of innovative financial instruments that are conducive to the greening of value chains; providing preferential credit support for qualified producers, manufacturers and traders; and playing an active role of export-oriented insurance companies, import and export banks and relief agencies in promoting greening in trade insurance credit enhancement and project investment.
PRIORITY 3: Promoting technological innovations related to green soft commodity value chains

ACTION 7: Launching technological innovation in production.

1. Developing and promoting low-carbon and environmentally friendly agricultural production technologies to reduce agricultural \( \text{CO}_2 \) emissions and increase agricultural carbon sinks.
2. Exploring excellent germplasm resources, and selecting a batch of green, safe, high-quality and high-performance germplasm resources for soft commodities, such as high-oil and high-protein soy.
3. Researching on the production technology of key soft commodity categories such as soy, and exploring production patterns and approaches that require less land and produce higher yields.

ACTION 8: Supporting revolutionary technological innovations related to the production of products sourced from soft commodities.

1. Improving R&D of feed formula, the production efficiency and bioavailability of feed, and reducing the demand for soybean meal.
2. Researching on formula upgrading, raw material substitution, product innovation and breakthrough technologies of consumer products sourced from soft commodities, e.g. artificial synthetic starch and protein, artificial meat technologies.

ACTION 9: Supporting innovations of recycling and reusing technologies.

1. Researching on the grading and reusing technologies of raw materials for soft commodities to improve the utilization rate.
2. Researching on the recycling and reusing technologies of the final products of soft commodities to improve the recycling rate and reduce the demand for raw materials of soft commodities.
PRIORITY 4: Launching management pilots of green soft commodity value chains

**ACTION 10:** Launching local pilots of green soft commodity value chains.

1. Guiding local governments to establish management systems and improving relevant policies for green soft commodity value chains.

2. Strengthening land use planning and monitoring, preventing deforestation and land clearing, and strictly observing the arable land and ecological redline policies.

3. Developing green agriculture, promoting the green transformation of agricultural production patterns, and carrying out research and demonstrations on improving land productivity.

4. Guiding local companies towards practices of green soft commodity value chains, supervising and verifying corporate actions, and evaluating the performance.

5. Launching campaigns of building demonstration communities of green soft commodity consumption, and exploring the incentive mechanism for green consumption of soft commodities.

**ACTION 11:** Launching corporate pilots of green soft commodity value chains.

1. Guiding companies to establish a green procurement management system for soft commodities, evaluating and selecting qualified commodities and suppliers, and setting up ledgers.

2. Performing due diligence in accordance with laws and regulations, and tracking legality information of product sources via public or independent traceability systems.

3. Improving business activities, upgrading the utilization efficiency of raw materials and reducing waste through technological innovation and formula upgrades.

4. Urging companies to fulfill CSR and strengthen environmental information disclosure.

5. Encouraging companies to join green value chains in their “going global” projects in the fields of agriculture and soft commodity trade, promoting the establishment of origin identification and product information traceability systems in places of origin; and helping producers change their production increase patterns and improving the capacity of greening.
1. Giving full play to the influence of financial institutions and promoting companies to carry out due diligence on the sustainability of soft commodities.

2. Offering low-interest or fast-disbursing loans to producers, manufacturers and traders that meet green performance standards.

3. Establish rules that require creditors and debtors to comply with environmental and social standards related to access and labor conditions of agriculture and forestry land. With regard to the legality and sustainability of commodities in soft commodity value chains, more stringent risk monitoring, reporting, verification, disclosure and risk control mechanisms are adopted.

ACTION 13:
Launching financial pilots of green soft commodity value chains.

1. Innovating the business model, cooperating with major sellers/retailers to promote the green soft commodity traceability system, carry out market promotion activities for certified soft commodities, and increase the market supply and share of certified commodities.

2. Summarizing the market incentive model for green consumption of soft commodities combined with local pilots, and exploring the policy framework design that contributes to green consumption of soft commodities.

ACTION 14:
Launching consumer market pilots of green soft commodities.

1. Joining hands with industry leaders to initiate the establishment of a soft commodity procurement alliance, with the purpose of promoting industry coordination and joint actions, avoiding unfair competition, and enhancing purchasers’ ability of bargaining and verification.

2. Developing unified industry guidelines on green procurement for soft commodities, and exploring the establishment of “whitelists” and “blacklists” of origins and suppliers.

3. Building an industry information platform of soft commodities.

4. Supervising, evaluating and guiding the green value chain management practices of industry players.
**PRIORITY 5: Strengthening the promotion and capacity building of green value chains**

**ACTION 15:** Launching industry capacity building activities and training talents for the management of green value chains.

1. Strengthening the basic theory research and management experience summary of green soft commodity value chains, clarifying the environmental impact of the production and consumption of soft commodities, sorting out and improving theoretical systems and operation guidelines, and carrying out regular policy promotion and implementation activities.

2. Carrying out trainings covering all sectors of value chains, and drafting content as per the characteristics, improving the green awareness, scientific decision-making ability and technology level of government officials, corporate managers and technicians (including micro, small and medium-sized enterprises), farmers and general consumers; forming the greening consensus and capacity across society, and accelerating the transformation from awareness to actions.

**ACTION 16:** Promoting the market-oriented development of green value chain-related consulting services and enhancing technical support.

1. Exploring to establish a market-oriented consulting and service mechanism for green value chains, encouraging the development of third-party technical service institutions, and developing regulations and supporting policies for such institutions.

2. Carrying out trainings for technical service institutions and staff, and promoting the standard, regulated and professional development of the consulting service market.

3. Strengthening the qualification management of green value chain technical service institutions and related technicians, performing dynamic review and evaluation, and enhancing the credibility of third-party technical service institutions.

**ACTION 17:** Strengthening public engagement and fostering a green consumer market.

1. Carrying out diverse promotion and education activities for the public, advocating healthy and sustainable diet as outlined in the *Chinese Dietary Guidelines*, promoting the certification of green soft commodities, and enhancing the public’s awareness and acceptance of green soft commodity value chains.

2. Regulating and guiding content related to soft commodities and the consumption in advertisements and literary and artistic works, encouraging to reduce waste, promoting the concept of green consumption, and fostering a public opinion environment for scientific and rational consumption.

3. Encouraging the public and social organizations to take part in and supervise the greening actions of value chains, and provide an impetus of demand and public opinion support for the green transformation of value chains.
PRIORITY 6:
Promoting international joint actions on green soft commodity value chains

ACTION 18:
Engaging in policy dialogue on green soft commodity value chains.

1. Establishing a bilateral dialogue mechanism with upstream producer countries and economies of major soft commodities; exchanging and discussing on policies and paths to promote the legalization and greening of soft commodity sources on the basis of thorough understanding and respect for development needs.

2. Establishing a bilateral dialogue mechanism with downstream consumer countries and economies of major soft commodities; exchanging policies and practices of greening soft commodity value chains, strengthening the synergy of policy actions, promoting the transfer of green agricultural technologies to producer countries, and discussing on the improvement of agricultural subsidies and the feasibility of tariff benefits.

3. Carrying out multi-level exchanges and dialogues among stakeholders of soft commodity value chains to enhance consensus and promote the consistency of policies and actions.

ACTION 19:
Exploring the incorporation of green value chain-related requirements into trade agreements.

1. Strengthening the coherence between national green value chain legislation and related industries; incorporating the feasibility and paths of measures related to the import and export of green soft commodities in bilateral and multilateral trade agreements (e.g. “deforestation free” commitment, joint regulation of the legality and due diligence mandates of production and trade, and concrete tariff benefits for green soft commodities) in order to avoid new trade barriers.

2. Promoting international mutual recognition of green value chain standard instruments and strengthening technical support for multilateral actions.

ACTION 20:
Launching technical assistance and capacity building for green production of soft commodities.

1. Channeling efforts to leverage international platforms such as the UN and international assistance mechanisms, tap into funding channels, and support soft commodity producer countries to carry out production-side green transformation technology demonstration projects.

2. Carrying out technical training for staff to enhance the green productivity of soft commodities.

3. Assisting soft commodity producer countries in developing policies and regulations; establishing and improving management traceability systems and platforms by means of digital technologies e.g. 5G, satellite remote sensing, Internet of Things, and AI.
Strengthening leadership and team building by running the top-level coordination mechanism, and by developing phased plans to guide local governments and industries to establish corresponding mechanisms and institutions, clarify the division of labor, and fulfill responsibilities.

Strengthening policy coordination and support by seeing to it that policies and measures at all authorities and levels are coordinated and integrated, and by developing supporting policies for funding and scientific research.

Strengthening innovation in technologies and methodologies by expanding R&D investment of core technologies, driving breakthroughs in technological innovation, applying high-tech technologies, incubating revolutionary technologies, facilitating collaboration of industries, universities and research institutes, and promoting innovative practices of building green value chains.
ACKNOWLEDGEMENT

Tropical Forest Alliance of World Economic Forum, Foreign Environmental Cooperation Center of Chinese Ministry of Ecology and Environment and World Resources Institute would like to express great gratitude to the following organizations and individuals participating in the research and development of the strategic framework for their painstaking efforts, particularly the funding partners of Tropical Forest Alliance of World Economic Forum driving effortlessly in building a deforestation and conversion free soft commodity supply chains, the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the Gordon and Betty Moore Foundation.

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