



The Global CEO Advisory Firm



# Net zero in China

Opportunities and challenges for multinationals

April 2022

## Overview

Decarbonisation has been a top priority in China since President Xi Jinping announced the country's commitment to achieve carbon peaking by 2030 and carbon neutrality by 2060 – the so-called “Dual Carbon” targets – at the UN General Assembly in 2020.

The level of official commitment to decarbonisation is apparent with the subsequent creation of a central government taskforce to tackle the issue, a rare and powerful endorsement of the importance of the undertaking.

The Dual Carbon targets were first announced as high-level, overarching “guiding opinions.”<sup>1</sup> They are now being followed by “implementation plans” that include specific, measurable targets.

These implementation plans are central to the government's concept of a “green transition.”<sup>2</sup> Multiple government ministries and government-backed industry associations are working with state-owned and private companies to develop

industry-specific implementation plans in areas that include transportation, consumption and manufacturing.

Some of these implementation plans have already incorporated innovative practices initiated by industry players. In the consumer goods sector, for example, the Implementation Plan for Promoting Green Consumption<sup>3</sup> cites the decision by China's online food delivery platforms to offer small portion meals and the ability to opt-out of utensils as best practices.



<sup>1</sup>《国务院关于加快建立健全绿色低碳循环发展经济体系的指导意见》  
[http://www.gov.cn/zhengce/content/2021-02/22/content\\_5588274.htm](http://www.gov.cn/zhengce/content/2021-02/22/content_5588274.htm)

<sup>2</sup>“Green transition” is an umbrella concept introduced by the government to reflect the fundamental direction of the transition away from a carbon-heavy economy to a decarbonised, “green” one. It is a general term used across all government documents, from the high-level “Guiding Opinions” released by the State Council, to the more detailed implementation plans and industry-specific targets set by the Ministries.

<sup>3</sup>《全面促进重点领域消费绿色转型》  
[http://www.gov.cn/zhengce/2022-02/14/content\\_5673400.htm](http://www.gov.cn/zhengce/2022-02/14/content_5673400.htm)



## Balancing economic growth and emissions

While the Chinese government has officially committed to decarbonisation, recent official statements on climate change also warn of the risk of reducing emissions too quickly. Thus, officials are calling for a steady green transition.

In his speech at the Two Sessions<sup>4</sup> in early March, President Xi said the process for achieving the Dual Carbon goals should be “determined and scientific and orderly.” In reducing carbon emissions, he indicated that China must also ensure the security of energy, food and industrial supply chains, in addition to “the normal life and work of our people.” In his delivery of the Report on the Work of Government, Premier Li Keqiang added that the transition should follow an “orderly substitution” of energy sources to ensure the current energy supply is maintained.

As a result of the pandemic, which slowed economic momentum for the world’s second-largest economy, China is now seeking to balance its commitment to decarbonisation with the need to prop up domestic consumption to support overall economic growth.

This draws our attention to the role of consumer goods companies in China, which would clearly benefit from an uptick in consumption but also need to be responsible corporate citizens in the area of carbon emissions.

Consumer goods industries are often overlooked in their contribution to carbon emissions. In this paper we look beyond traditional heavy emitting industries such as coal, oil and gas. Instead, we focus on those that touch consumers’ daily lives and where multinational companies have a greater presence in China, such as companies in the apparel, food and beverage (F&B) and pharmaceutical sectors. In particular, we will look at where there are opportunities for these companies to articulate decarbonisation narratives and action plans that are in line with central government priorities and have the potential to deliver competitive advantages in the market.

<sup>4</sup>The Two Sessions refers to the annual gathering of the National People’s Congress (NPC) and the Chinese People’s Political Consultative Conference (CPPCC) in Beijing. At this event, the government announces China’s GDP target and the Premier delivers the Report on the Work of Government, which sets the tone for overall economic development and policy.

# Tailoring a decarbonisation strategy for the apparel sector

Many consumers deem clothes to be disposable and to have a smaller environmental impact than so-called “durable” products. However, the apparel industry is the sixth-largest energy user in China,<sup>5</sup> is generally highly water intensive and often produces polluting by-products.

Most multinationals in the apparel sector have carved out decarbonisation agendas globally, but many have yet to articulate clear and comprehensive decarbonisation strategies or to launch initiatives that are specific to the China market.

If multinationals have launched specific initiatives in China, they are often announced on an ad-hoc basis and are not explicitly part of an overall narrative that incorporates both the company’s and the country’s decarbonisation objectives.

Apparel companies may not have invested in localised decarbonisation initiatives in China because of perceived lack of potential for financial return, especially when foreign brands can attract consumers through other factors such as high quality and brand prestige.

But according to a report published by Jiemian in December 2021, 86% of respondents surveyed consider themselves to be low-carbon consumers, a significant increase from 61% in 2020.<sup>6</sup> The fact that Chinese consumers are becoming more

conscious of the environmental impact of their spending habits means brands have the opportunity to respond to this substantial shift in consumer attitudes and expectations.

We found three main areas in which multinationals have been showcasing their contributions to China’s decarbonisation agenda:

**1.** Many foreign brands have actively promoted **innovative emissions-reducing** technologies. For example, at the 2021 China International Import Expo (CIIE), Uniqlo showcased a whole garment seamless knitting machine that can reduce material waste and a washing technology that saves up to 95% of the water used in the production of jeans.<sup>7</sup>

**2.** Brands have also worked on **promoting environmental awareness and responsible consumption among consumers**. As part of its “Buy Better Wear Longer” sustainability campaign, Levi’s posts tips on its official WeChat account to help consumers mend their old denim clothes in a manner that makes them more fashionable and allows them to be worn longer.<sup>8</sup>

**3.** Some companies proactively try to ensure sustainability standards are followed throughout their supply chains and communicate with stakeholders transparently through **self-monitoring and regular reporting**.

# Common obstacles facing apparel companies

Despite the numerous positive steps taken by individual companies in China, multinationals in the apparel sector continue to face challenges when it comes to making meaningful progress on decarbonising their operations and supply chains in the market.

**1.** First, upgrading manufacturing facilities requires investment, which might translate into **higher prices**. One noteworthy finding from the Jiemian report is that 12.8% of respondents say they would not purchase low-carbon clothing if it is more expensive than regular clothing. This was the highest level of reluctance when compared to product categories such as groceries, food, cars, electronics and furniture.<sup>9</sup>

**2.** Another challenge comes from **tracing upstream suppliers**, especially lower-tier suppliers. As noted in a sustainability report by the Institute of Public and Environmental Affairs (IPE),<sup>10</sup> relevant suppliers include not only raw material suppliers and manufacturers, but also partners such as chemical suppliers, wastewater treatment plants and logistics suppliers.<sup>11</sup>

However, improving supply chain traceability by working with more carbon-conscious suppliers also entails engaging an appropriate auditor, which can potentially increase production costs.

**3.** Finally, a key aspect of responsible and low-carbon consumption is purchasing less clothes and wearing them longer. By encouraging responsible consumption, however, companies also risk undermining their profits.

<sup>5</sup> <https://www.mdpi.com/1996-1073/12/14/2783/htm>  
<sup>6</sup> <https://www.jiemian.com/article/6938230.html>  
<sup>7</sup> <https://j.eastday.com/p/1636156913045070>  
<sup>8</sup> <https://mp.weixin.qq.com/s/vZxtZDmP8npsy2FsOZLLpg>

<sup>9</sup> <https://www.jiemian.com/article/6938230.html>  
<sup>10</sup> The Beijing-based Institute of Public and Environmental Affairs (IPE) evaluates the sustainability of more than 600 foreign and domestic brands in its annual Corporate Information Transparency Index (CITI).  
<sup>11</sup> <https://www.ipe.org.cn/Upload/202201180643354234.pdf>

## Decarbonisation among multinationals in China's F&B sector

Like multinational apparel brands, some of the most iconic international food and beverage (F&B) companies with operations in China have established clear narratives for how they intend to decarbonise globally, but have yet to communicate how they plan to decarbonise in China. However, despite the lack of a China-specific narrative, many F&B multinationals are taking steps to reduce their emissions in China.

A number of multinational restaurant chains and cafes have turned to their vast real estate presence across the country as a way to reduce their energy consumption and carbon footprints.

For example, McDonald's announced its 1,000th LEED-certified store in China in November 2021. Adhering to a globally recognised environmental building standard such as Leadership in Energy and Environmental Design (LEED) is a relatively easy win for multinational brands. The certification helps quantify their carbon footprint reduction efforts so far in China and gives stakeholders an idea about the road that lies ahead. Initiatives like this could be incorporated into each F&B company's broader decarbonisation narrative in China and globally.

Similarly, some multinational F&B producers are embracing renewable energy initiatives at the manufacturing and distribution stages of production in China. For example, Carlsberg and AB InBev have said their breweries in China will aim to source more of their electricity from renewable sources.

Carlsberg reports that it has already switched from coal-fired to natural gas-fired boilers and is using nano-insulating materials to cut energy consumption by 10% on its production line. In terms of transportation, AB InBev notes that its delivery trucks in China are powered by liquefied natural gas (LNG), electricity or hydrogen.<sup>12</sup>

Encouraging consumers to minimise their contribution to packaging waste has been another way for F&B retailers and producers to demonstrate their commitment to reducing their carbon footprints. The Chinese government put policy weight behind these efforts in 2020 when it announced that single-use non-biodegradable plastics will be banned from 2025. Many F&B outlets in China are already moving in this direction, rewarding customers with discounts for bringing their own cups or asking customers to reflect on whether they need disposable cutlery during the ordering process.

So far it has proved difficult to extend this behaviour to homes, as Chinese consumers have proven reluctant to sort their recycling and waste, partly due to the ubiquity of take-out and delivery food and heavily packaged e-commerce deliveries. Thus, this is an area where a mix of domestic policy and the insights and experience of multinational F&B companies might be able to nudge consumers in a more sustainable direction.



<sup>12</sup> <https://www.ab-inbev.com/content/dam/abinbev/news-media/press-releases/2021/02/AB%20InBev%20ESG%20Report%202020%20HD%20Final.pdf>

## Food (waste) for thought

While multinational companies are looking to reduce packaging and plastic waste, tackling food waste is one area they have yet to address in either their decarbonisation efforts or their corporate narratives in China.

Food waste in China produces a significant carbon footprint across the F&B supply chain. One study<sup>13</sup> equated this to the carbon emissions of a medium-sized country such as the UK.

Given the production and distribution of food contributes to China's emissions, and that 27% of the food produced annually for human consumption in China is not eaten, food producers and chains have the opportunity to minimise food waste and loss as part of their broader decarbonisation plans. Transportation and storage of food represents another opportunity for decarbonisation.

Addressing food waste is also an opportunity for multinational F&B producers and retailers to align their efforts with government policies. For example, the Central People's Government has sought to tackle food waste and loss as part of its wider strategy to safeguard China's food security.

Legislation was enacted in April 2021, under which restaurants can be fined up to RMB10,000 if they are found to repeatedly encourage customers to order excessive quantities of food.

Restaurants are also permitted to charge customers who leave excessive quantities of food behind. President Xi even personally warned against over-ordering food in 2020.

This heightened sensitivity may explain why restaurants which have not addressed this issue are already being "named and shamed" in the popular press.

For example, Yum China-owned KFC was criticised in January 2022 by the government-backed consumer lobby group China Consumers Association (CCA) for encouraging food waste. KFC was running a "blind box" promotion with toy company POP Mart, where customers received a free POP Mart toy with every meal. The CCA argued that the promotion led POP Mart fans to order KFC meals without the intention of eating them.

Given the high priority of food waste at the policy level, and the fact that it contributes to China's carbon footprint, F&B companies would be wise to explore how they can proactively tackle this issue and incorporate it into their decarbonisation efforts in China.

## Turning the spotlight on pharma

Globally, pharmaceutical companies are proactively addressing decarbonisation. Leading global players have set clear roadmaps towards achieving net zero emissions in the coming decades and have implemented strategies to address issues such as waste disposal and water use.

For example, Novartis has laid out a clear strategy and roadmap for its own operations and those of its suppliers. Novartis has committed to achieving net zero by 2040 and is in the process of aligning its strategy and targets to the new Science Based Targets (SBT) Net Zero Standard published in October 2021.<sup>14</sup> In general, pharmaceutical companies have demonstrated strong awareness of the need to address decarbonisation, either by setting a specific, measurable and well-articulated strategy and clear roadmap or by addressing the topic in the broader sustainability sphere.

Many leading pharmaceutical companies, however, have not yet publicly laid out China-specific decarbonisation roadmaps. Publicly available information indicates that the China divisions of pharma multinationals have a general awareness of sustainability and environmental protection, but in most cases existing initiatives are fairly general and focus on areas such as waste management and setting targets to conserve water and electricity usage. Some have vowed to follow the net zero targets established by their global headquarters, but in most cases they seem to lack implementation plans.

Yet as more players enter China's pharma sector, the growth rate of related emissions is rising. From 2000 to 2016, total emissions generated by China's pharmaceutical industry is estimated to have more than doubled to 55.34 metric tons (Mt).<sup>15</sup>

Furthermore, China's 14th Five-Year-Plan for Pharmaceutical Industry Sector Development calls on the pharmaceutical sector to develop in a "green" and low carbon way. The industry is expected to come up with practical solutions to address decarbonisation, including setting up emissions reduction targets and adopting green supply chain standards.

<sup>13</sup> <https://www.nature.com/articles/s43016-021-00317-6>

<sup>14</sup> <https://www.novartis.com/esg/environmental-sustainability>

<sup>15</sup> [https://www.researchgate.net/publication/331738558\\_Analysis\\_of\\_energy-related\\_CO2\\_emissions\\_in\\_China's\\_pharmaceutical\\_industry\\_and\\_its\\_driving\\_forces](https://www.researchgate.net/publication/331738558_Analysis_of_energy-related_CO2_emissions_in_China's_pharmaceutical_industry_and_its_driving_forces)

## A point of differentiation?

As pharmaceuticals was one of the first sectors opened to foreign investment in China, global pharma players enjoyed preferential market access and government support for much of the past three decades.

However, the industry landscape in China is changing due to growth in the number and size of domestic companies. Pharma multinationals now find themselves competing directly with Chinese counterparts and could lose their previous preferential access to support as these resources are reallocated to underwrite innovation by domestic players.

Against this backdrop, it is important for multinational pharmaceutical companies to identify opportunities to align with Chinese government priorities and to differentiate themselves in the market. Many have always expressed commitment to producing quality medications, delivering innovative clinical care to patients and addressing China's general health concerns.

Going forward, there is an opportunity to complement these efforts by elaborating and implementing China-specific decarbonisation efforts. Targeting tailpipe emissions in cold chain shipping, for example, is something that pharmaceutical multinationals in China could work on and speak to. This is especially true considering COVID-19 increased attention to the contribution of cold chain storage and shipping to pharma supply carbon emissions.

With the Dual Carbon targets established as cornerstone government policies as China pursues a green transition, multinational pharmaceutical companies have the opportunity to leverage China-specific decarbonisation strategies as a way of securing social and government licence to operate in an increasingly competitive market.



### Dress, Eat, Live & Travel

The establishment of China's dual climate goals of achieving peak carbon by 2030 and carbon neutrality by 2060 requires a revolution in how the people of China dress, eat, live and travel. We have already seen significant regulatory force put behind the goals, particularly around the COP 26 meetings in 2021, and expect further action on this front ahead of COP27, which will take place in November 2022.

With China set to remain the world's factory for many years to come, how things are made and their environmental impacts will be ever more important as investors increasingly take the ESG performance of global companies into account. At the same time, consumers in China are increasingly judging companies on their environmental and social credentials and are spending accordingly.

This pincer force of Chinese regulation and ESG demands from international investors and retail clients results in a host of new management challenges for international and local companies operating in China. Those in the consumer sector find themselves under the spotlight, facing demand for real action on ESG from multiple stakeholder audiences.

#### Technology on the forefront for consumer companies

Global brands, whether at the lower or higher end of the market, have significant influence in terms of setting trends through design and promotion. At the same time, they are specifically interested in how existing and emerging technologies can help make textiles and garments more sustainable throughout their product lifecycle.

For example, H&M has been working with the Hong Kong Research Institute of Textile and Apparel (HKRITA) since 2016 to work on recycling textiles and clothing. The partnership has already created several disruptive technologies that are helping to substantially lower the environmental footprint of clothing waste.

These technologies can be used in and outside China. For example, a factory producing clothing in China will have to be increasingly "green" as the government implements circular economy regulations. At the same time, a global fashion brand will need data for the entire lifecycle of a garment to prove their environmental practices to regulators while also promoting their clothing as sustainable.

#### Business models contribute to ESG goals

Beyond the technologies involved in garment production and recycling, fashion brands have the opportunity to innovate in other business areas, including how their clients think about clothing and the way they dress.

This includes thinking outside the box, to explore the potential to create business models that have lower environmental impact but are "cool" and garner consumer interest and engagement at the same time. This could be via a value-add service through which a brand helps people dress by providing a "managed wardrobe service" that factors in the latest fashion trends, the changing of seasons and recycling or upcycling garments that are no longer wanted.

#### Innovating in the food sector

Food is another major area with significant potential for innovation to enhance ESG. Governments are increasingly concerned about food security, especially as the Russian invasion of Ukraine has destabilised grain production and markets. With the largest population in the world, China's policy has always focused on food security for its people.

China's Clean Plate 2.0 campaign is pushing eateries to offer food in ways that limit waste. This requires the F&B sector to rethink everything from ingredient procurement to food storage, cooking and recycling kitchen and food waste. There are potentially huge cost savings to be gained.

This trend is likely to be linked to wellness, health and sustainability – and to ESG performance metrics – as food waste has a significant impact on carbon emissions.

#### The tip of the iceberg

But these initiatives in fashion and food supply are just the start. China is already a highly digital society. The next stage is digitalising more aspects of business and daily life so that emissions-related activities can be better managed.

For example, Tokyo has an emissions trading system for buildings – could this be the future for other cities?

We are all going to have to change our travel habits. Is there a metaverse-enabled digital future in which virtual travel could be an experience that is worth paying for rather than traveling to far-flung parts of the world by airplane?



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# Government and social license to operate

Despite the macroeconomic headwinds currently facing China, the central government has made it clear that carbon neutrality is high on the policy agenda. The “Dual Carbon” targets establish a firm mandate to reduce carbon emissions across sectors – not just in traditional heavy polluting industries – and lay out a clear timeline for doing so.

Multinationals in the apparel, F&B and pharmaceutical sectors have announced an array of emissions reduction initiatives globally. However, our observations suggest that many multinationals have yet to respond to the Chinese government’s call to action across their operations in China.

We see a strong opportunity for companies in these industries, and across goods and services sectors, to craft clear over-arching narratives and action plans that speak directly to how they are contributing to China’s net zero journey.

As the government further entrenches the concept of a green transition by implementing more granular climate policies across industries, while also seeking to grow domestic consumption, consumer-facing multinationals are well-positioned to align themselves with this goal through the development and implementation of China-specific decarbonisations narratives.<sup>16</sup>

As noted above, this is imperative not only to ensure these companies maintain government licence to operate in China, but increasingly will influence their social license to operate as consumers vote for green products and services with their wallets.

## Key considerations for multinational corporations

Focus area	Key considerations
<b>Establish a clear China net zero target</b>	<ul style="list-style-type: none"> <li>Consider setting a specific net zero target for the China market or explicitly including China in the company’s global net zero target and strategy</li> <li>Ensure the net zero target that applies to China aligns with the Chinese governments Dual Carbon targets</li> </ul>
<b>Narrative positioning</b>	<ul style="list-style-type: none"> <li>Develop and communicate a decarbonisation narrative and strategy that aligns with Chinese government policies and market expectations to ensure regulatory and social license to operate</li> <li>Carefully monitor and ensure alignment between decarbonisation narratives in China and internationally</li> </ul>
<b>Engage internal and external ambassadors</b>	<ul style="list-style-type: none"> <li>Ensure employees are aware of and engaged with ESG-related initiatives and encourage them to serve as sustainability ambassadors, highlighting ESG-related initiatives to their families, friends and neighbours</li> <li>Work with influencers to highlight company ESG initiatives to key stakeholders, including the government and the community</li> </ul>
<b>Engage supply chain and partners</b>	<ul style="list-style-type: none"> <li>Carefully monitor supply chain emissions and work with suppliers and vendors to help ensure compliance with sustainability regulations and standards in China and end markets</li> <li>Partner with suppliers and vendors to align and communicate sustainability practices and accomplishments along supply chain, through manufacturing and in end markets</li> </ul>
<b>Risk analysis</b>	<ul style="list-style-type: none"> <li>Develop a deep understanding of policies and related risks that may affect the Chinese government’s treatment of a given company or industry</li> <li>Ensure processes are in place to review business plans and investments in light of relevant regulatory requirements</li> <li>Track industry specific challenges and analyse risk management best practices in other markets and by other entities</li> </ul>
<b>Analytics &amp; reporting</b>	<ul style="list-style-type: none"> <li>Embed policies and practices for monitoring and reporting risk management metrics</li> <li>Ensure clearly defined key performance indicator (KPI) frameworks are in place to monitor and evaluate decarbonisation policies and practices</li> </ul>
<b>Policy engagement</b>	<ul style="list-style-type: none"> <li>Support government policy making process by contributing to policy conversation around implementation of the Dual Carbon targets and related initiatives</li> <li>Contribute to related government consultations when possible</li> </ul>
<b>Industry engagement</b>	<ul style="list-style-type: none"> <li>Actively participate in industry regulatory bodies and national associations to gain deeper understanding of the wider discourse around decarbonisation and industry level initiatives to support the Dual Carbon targets</li> </ul>

<sup>16</sup> McDonalds, AB InBev and Yum China are or have been Teneo clients.

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