China's Dual Carbon Policy Intensifies, Chinese Fastener Companies Must Step Up

中国双碳政策再加码，紧固件企业须加油

1. Changes in the Dual Carbon Policy

Recently, China's National Development and Reform Commission (NDRC) consecutively held two important meetings, clearly listing "comprehensively transforming to promote green and low-carbon development through dual carbon emission control" as a key task for the second half of the year and the "15th Five-Year Plan" period. The "dual carbon" (carbon peak and carbon neutrality) related work has been further strengthened, reflecting a major transformation in China's energy governance. The key point is that these meetings mark **China's shift from past "energy consumption constraints" to "carbon emission constraints."** Simply put, in the past, enterprises focused mainly on how much energy they consumed; now the focus is on how much carbon dioxide they emit. This is not a small change but a historic turning point. Previously, controlling only energy consumption may have restricted some new energy industries because some new energy projects might have high initial energy consumption but very low carbon emissions. Now, by shifting to carbon emission constraints, green and low-carbon development will be promoted more scientifically, ensuring economic growth and actualizing environmental goals.

Starting September 1, companies must first "calculate their carbon emissions" before project approval, because a veto is no joke. **The core of this policy change lies in the officially implemented "Measures for Energy Conservation Review and Carbon Emission Evaluation of Fixed Asset Investment Projects" from September 1.** Despite its lengthy name, its contents are closely related to enterprises, mainly reflected in three aspects.

First, a major system adjustment. **For all fixed asset investment projects, a "control report on energy and carbon" incorporating carbon emission evaluation into the full life-cycle management of the project must now be simultaneously submitted.** This means that enterprises must "calculate their carbon emissions" clearly from the start of project establishment, with fossil energy consumption and carbon emission intensity being key review points. If the carbon emission is unclear or does not meet standards, the project may be "vetoed outright." Previously, companies might have focused mainly on whether a project was profitable or technically feasible; now whether the carbon emissions meet standards is an additional criterion. This requires companies to consider environmental factors from the outset and control carbon emissions at the source.

Second, goal upgrade. According to the Chinese State Council's plan, by 2025, a solid validating foundation must be built; **during the "15th Five-Year Plan" period, a dual control mechanism focused on emission intensity control supplemented by total emission volume control will be implemented. After reaching carbon peak, the focus will shift to the management prioritizing total volume.** This design is quite reasonable—it accommodates current economic development needs and leaves buffer space to achieve carbon peak before 2030. For example, like personal weight loss, one might first focus on body fat percentage (intensity), and after stabilizing physical condition, shift to controlling total body weight (total volume). Enterprises will similarly first gradually adjust carbon emission intensity, then progressively control total volume, easing pressure so it does not overwhelm them suddenly.

Third, technology empowerment. **The "Measures" require establishing a carbon emission monitoring network covering national, local and enterprise levels, using high technologies such as satellite remote sensing and blockchain for real-time data tracking.** This is like equipping carbon emissions with "telephoto lens" and "recorders," making data falsification much harder. Enterprises' carbon emission status can be accurately monitored, which also pressures companies to earnestly work on emission reductions. China's domestic carbon market is soaring in activity, with the price of carbon emission allowances nearly doubling, increasing companies' incentives to reduce emissions.

2. Progression of the "Dual Carbon" Policy

With the advancement of the "dual carbon" policy, China’s domestic carbon market has become increasingly mature. In 2021, the average price of carbon emission allowances was 46.60 RMB per ton; by 2024, it had risen to 91.82 RMB per ton, nearly doubling. What does this mean? Carbon allowances are becoming more valuable.

Driven by national policies, China’s carbon market mechanisms have improved steadily, and the implementation of carbon indicators has given real value to carbon allowances. Previously, companies might have seen emission reductions as an extra burden; now it’s different. Carbon allowances that are saved through emission reductions can be sold, greatly boosting enterprises’ motivation to cut emissions.

For example, if a company reduces its carbon emissions through technological upgrades, the saved carbon allowances can be sold to companies exceeding their emission limits. This is a win-win: making money while contributing to environmental protection. The carbon market acts like an invisible hand, using market mechanisms to drive companies to voluntarily reduce emissions—more effective than mere administrative orders. The rising carbon price also shows growing market confidence in the “dual carbon” goals. Everyone recognizes emission reductions are a major trend, and demand for carbon allowances will increase, naturally pushing prices up. This further encourages more companies to join the emission reduction effort, creating a virtuous cycle.

3. Fasteners Companies Must Step Up

3.1 Pay Attention to Favorable Information

The fastener industry is entering a positive phase. Fastener companies should pay attention to equipment manufacturers in the chemical sector and those involved with clean carbon reduction and environmental recycling equipment, which will embrace good opportunities.

First is biomass fuel and biodiesel-related equipment. With policy promotion, domestic demand for these clean energy sources will definitely rise. Equipment companies with substantial technological accumulation in biomass energy will see considerable potential for fastener demand as the market grows, expected to develop further benefits under the policy.

Second are companies in the recycling sector. With high engineering and technical content and strong technical capabilities, they provide robust technical support for the industry. As leaders in recycling plastics equipment, they hold significant advantages in resource circular utilization, aligning well with the trend of green development. While policies are favorable, market risks should not be ignored. Although the "dual carbon" policy brings many opportunities to fastener companies, some risks also require attention.

3.2 Opportunities and Challenges

First, the intensity of policy implementation may fall short of expectations. No matter how good the policy is, it is ineffective if not properly implemented. If local governments dilute enforcement or companies respond passively, emission reduction targets may be difficult to achieve, affecting the development of the fastener industry and companies.

Second, the effectiveness of policy implementation may be less than expected. Even if policies are pushed hard enough, actual effects may fall short. For example, monitoring technology failures could lead to inaccurate data, or costly emission reduction measures might disrupt normal corporate operations, all reducing policy effectiveness.

Third, risks from supply and demand changes. As the carbon market develops, supply and demand dynamics for carbon allowances may fluctuate. Oversupply could lower prices, weakening companies' motivation to reduce emissions; sudden demand surges could cause price spikes, imposing extra burdens on some companies. Additionally, supply-demand changes in biomass fuels, recycled plastics, and related products will also impact the performance of relevant fastener companies.

4. Conclusion

Overall, the NDRC's recent policies represent an important step in China's push for green and low-carbon development. The shift from dual energy consumption control to dual carbon emission control may seem like a minor wording change, but it signals a major transformation in development concepts and models. This approach not only promotes high-quality economic development in China but also contributes China's power to the global effort against climate change. For fastener companies, it is essential to actively adapt to policy changes, proactively transform and upgrade, and seize this wave of development opportunities.

The deepening of the new "dual carbon" policy is profoundly reshaping China's economic landscape and fastener industry ecology. It will be interesting to see which fastener companies shine under this policy dividend, driving China's economy toward a greener, more sustainable future.