

The progress and insights of China's biobased polymer market

Abstract:

In 2022, the Chinese government's national strategy officially introduced the biobased economy through the 14th Five-Year Plan. The plan clearly outlines the following objectives: to promote the steady growth of bioenergy, to replace traditional chemical feedstocks with bio-based alternatives, and to develop bioprocesses as substitutes for conventional chemical processes. Behind the strategy lies China's pledge to achieve carbon neutrality by 2060 and its national security concerns regarding reducing dependence on oil and natural gas.

China has remained the largest chemical producer and consumption market since 2009. In 2022, the global capacity to produce plastics has reached 400 million tons, with China contributing 32%. It has developed a sophisticated industrial chain, a robust chemical industrial base, highly skilled technicians and workers, and a vast growing market. However, China is also the world's largest emitter of greenhouse gases. In 2020, it accounted for 27% of total worldwide GHG emissions. It is worth noting that China's chemical industry accounts for 13% of its total CO₂ emissions.

Can China successfully transition from its fossil-based chemical industry to a biobased economy? Will China become the leader of the biobased economy in the future? These questions require examining the availability of biomass feedstock to support its development, the market's willingness to accept the green premium price and the availability of mature technology.

This report will address the questions above by examining the biobased polymer sector in China, specifically focusing on 20 commercially available polymers and building blocks. Our analysis will assess the current market size, production capacity, and the key players. Furthermore, we will interpret policies, regulations, and governance. This report could serve as in-depth market intelligence for European companies seeking to conduct business in China.