Light Industry Development Plan Released — Defined Future Direction of the Paper Industry at State Level in the Next Five Years

In order to implement the national plan for "13th Five-Year" and *China Manufacturing 2025*, in accordance with the relevant requirements in the *Notice on Printing and Distributing the "13th Five-Year" Plan System of Ministry of Industry and Information Technology* (MIIT) (Office of MIIT 2015 No. 24), MIIT recently complied and released the *Light Industry Development Plan (2016-2020)* (MIIT 2016 No. 241, hereinafter referred to as plan).

The plan proposed during "13th Five-Year" period, the industry should be market oriented, center on improving the development of quality and efficiency, take deepening adjustment and innovation as the main line, enterprises as the main body, enhancing innovation, quality management and brand building capabilities as the key points, vigorously implementing the strategy of increasing grades, improving quality and creating brand (grade, quality and brand strategy for short), improving the business environment; working from both supply side and demand side, to promote intelligent and green manufacturing, optimize industrial structure and build the new light industry manufacturing system of intelligent,

green, service-oriented, and internationalization, in order to lay the groundwork for the goal of constructing a strong manufacturing country and a comprehensive well-off society.

The plan proposed a specific task deployment from six aspects including vigorously implementing the grade, quality and brand strategy, enhancing the ability of independent innovation, and actively promoting the intelligent development, adjusting the industrial structure, fully implementing green manufacturing, coordinating domestic and foreign markets. As the specific plan for guiding the development of light industry during the "13th Five-Year" period, the plan will guide light industry innovation and development in the next five years, promote the transformation from "large light industry country" changed to "strong light industry country".

The Plan Proposed a Series of Major Target

During "13th Five-Year" period, the increased value of light industry is expected to achieve to an average annual growth rate of 6% to



7%, with further optimization of the allocation of production factors, and enhancing cooperation ability in the industrial chain.

Significantly enhance innovation capability. The proportion of enterprise research and experimental development expenditure in above scale key enterprises in light industry accounted for over 2.2% of the core business income, further improve the technological innovation system with the enterprise as the main body, accelerate innovation of manufacturing mode, management mode, business mode and service mode.

Significant energy-saving and emission reduction. Energy consumption of industrial increased value in above scale unit decreased by 18%, water consumption decreased by 23%, carbon dioxide emissions decreased by 22% compared to 2015.

The Plan Defined the Main Direction of Paper Industry Development

Promote the paper industry development toward the direction of energy conservation, environmental protection, and green. It is to strengthen the R&D and application of efficient utilization technology of fibrous raw materials, high-speed paper machine automation control integration technology, cleaner production and comprehensive utilization of resources technology. Focus on the development of fine paper with moderate brightness, unbleached tissue paper and high-grade packaging paper, as well as high-tech specialty paper, and increase the function, grade and quality of paper and paper products. Make full use of domestic and foreign resources, increase the construction of domestic waste paper recovery system, improve resource utilization efficiency, and reduce the risk of high dependence on foreign raw materials.

The Plan Pointed out the Main Development Direction of Papermaking Equipment Manufacturing Industry

Focus on the development of a new generation of pulping technol-

ogy and equipment, new energy efficient papermaking equipment and pollutant treatment equipment, new technology and equipment of biomass derived materials, and accelerate the intelligent, information technology and robot technology application. The intelligent high-speed tissue paper machine, CTMP high-consistency refiner commercialization technology, and shoe type press technology were included in the key equipment manufacturing level upgrading project.

In the Major Engineering Field, the Plan Emphasized and Detailed the Development Directions of Paper Industry and Papermaking Equipment Manufacturing Industry

The "New material research and application engineering" in the plan pointed out that the industry should focus on the development of high performance asbestosless composite sealing material, special paper based composite material, high performance air and fuel filter material for vehicle, electrical insulating paper, modified cellulosic biomass materials.

The "Intelligent development promotion project" in the plan pointed out that the industry should strive to promote and improve intelligent, information and robot technologies including DCS control, monitoring system of quality and operation, energy-saving dispatching center, and enterprise information management system.

The "Energy-saving and emission reduction technology promotion project" in the plan pointed out that the industry should focus on promoting clean pulping technology for non wood fiber materials, replacement cooking, oxygen delignification, high-consistency screening and bleaching of pulp, high-efficient forming of paper machine, multi stage counter flow washing closed screening, displacement twin-roll press, multi disc classification and reusing technology of white water in paper machine, and comprehensive utilization of sludge technology.