Waste-To-Wealth: Green Potential from Palm Biomass in Malaysia

Abstract

This paper gives an overview of the green potential of the palm biomass industry, which contributes to Malaysia's economic and sustainable development. An overall picture of the green development indicators of the country is provided based on the authors' experiences in policy making, research and business development. The emerging palm biomass industry in Malaysia is foreseen to dominate the country's directional development in the coming years, particularly when the sustainability issue is raised globally. With the increasing volume of palm oil residue accumulation due to palm oil production, palm biomass is gaining significant attention and being increasingly utilised to produce various green products as well as highly valuable biochemicals, such as bioethanol, vitamins, etc. The palm oil industry has been identified as the key industry for expansion to achieve economic advancement along with the development of greener production processes in the country. Research on palm biomass, which is actively being carried out by both private and public institutions, is categorised. Furthermore, actions and policies to promote the implementation of green technology in Malaysia, while simultaneously defending both environmental and ecological health and promoting technology transformation, are summarised. Challenges and concerns over the green future of the country are discussed, as well as the business trend in the Malaysian palm biomass industry.