Promotion of a green economy with the palm oil industry for biodiversity conservation: A touchstone toward a sustainable bioindustry

ABSTRACT

Palm oil is a representative and important biomass, not only as the most edible vegetable oil consumed worldwide, but also as a material for chemicals and biofuels. Despite the potential sustainability of the palm oil industry, it has conventionally emitted excess greenhouse gases, waste materials, and wastewater, brought land use change, thus affecting the natural environment. Therefore, the successful development of a sustainable palm oil industry is a touchstone for promoting the bioeconomy. Here, we first review the concept of the bioeconomy and the positive and negative aspects of the palm oil industry. Then, we consider solutions for introducing a green economy into the palm oil industry, such that it may coexist with biodiversity and environmental conservation toward the Sustainable Development Goals.