

## Sensitivity Analysis of Microalgae-based Processing Network

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In this study, we perform sensitivity analysis of microalgae-based biorefineries from economic perspective. The effect of five key parameters including cost of feed, lipid contents, fractional conversion of lipids into biodiesel, residue conversion into valuable products and lipid extraction yield on gross operating margin is investigated. This analysis allows us to evaluate the impact of these parameters which they can create on the overall economics of microalgal biorefinery through improvements from both engineering and biological standpoints, and to set the future research targets in the area of microalgae-based biorefinery.