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Comparative techno-economic analysis of single-step and two-step biodiesel production with supercritical methanol based on process simulation

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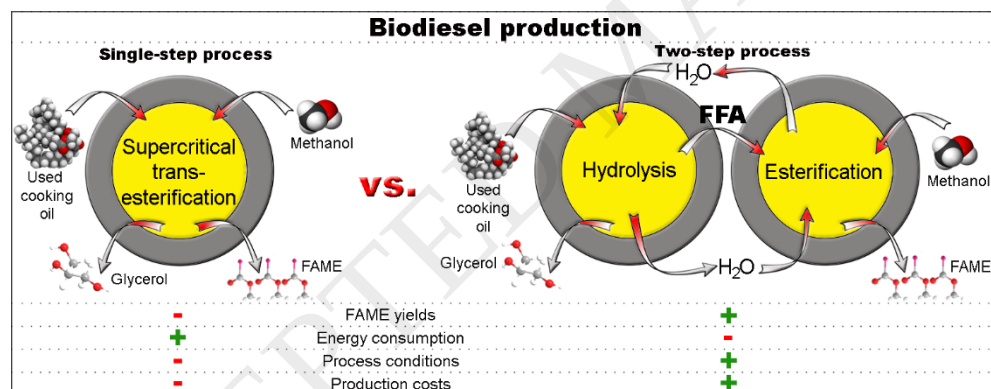
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Graphical abstract



Highlights

- Industrial scale capacities simulated with process design software Aspen Plus 8.8.
- Supercritical process is a techno-economically viable solution for UCO processing.
- Two-step process has lower investment and costs per unit of biodiesel produced.
- Higher energy cost of the two-step process is compensated by higher yields.

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