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### **ACCEPTED MANUSCRIPT**

## Effect of solids loading on ethanol production: Experimental, Economic and Environmental analysis.

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#### Highlights:

- Hydrolysis and fermentation were conducted at 19%, 30%, and 45% solids
- Corn stover at 45% solids loading released 205±25.8 g/L glucose and resulted in 115.9±6.7 g/L ethanol after 60h of fermentation
- Techno-economic analysis revealed an ROI of 8% at 45% solids loading

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