

The Role of Ionic Liquid Pretreatment and Recycle Design in the Sustainability of a Biorefinery: a Sugarcane to Ethanol Example.

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Supplementary Information

Figure S1: Mass proportion of the three main components during pretreatment at several solid loadings, considering three different biomass moisture, e.g., 50 %w (A), 30 %w (B) and 10 %w (C), and assuming an anhydrous ionic liquid.

Figure S2: Ionic liquid make-up sensibility analysis (Off-Season operation)

Figure S3: Global warming mitigation capacity for the same sugarcane stalk crushing capacity

Figure S4: 2G facility simulation

Figure S5: recycle hierarchy simulation

References

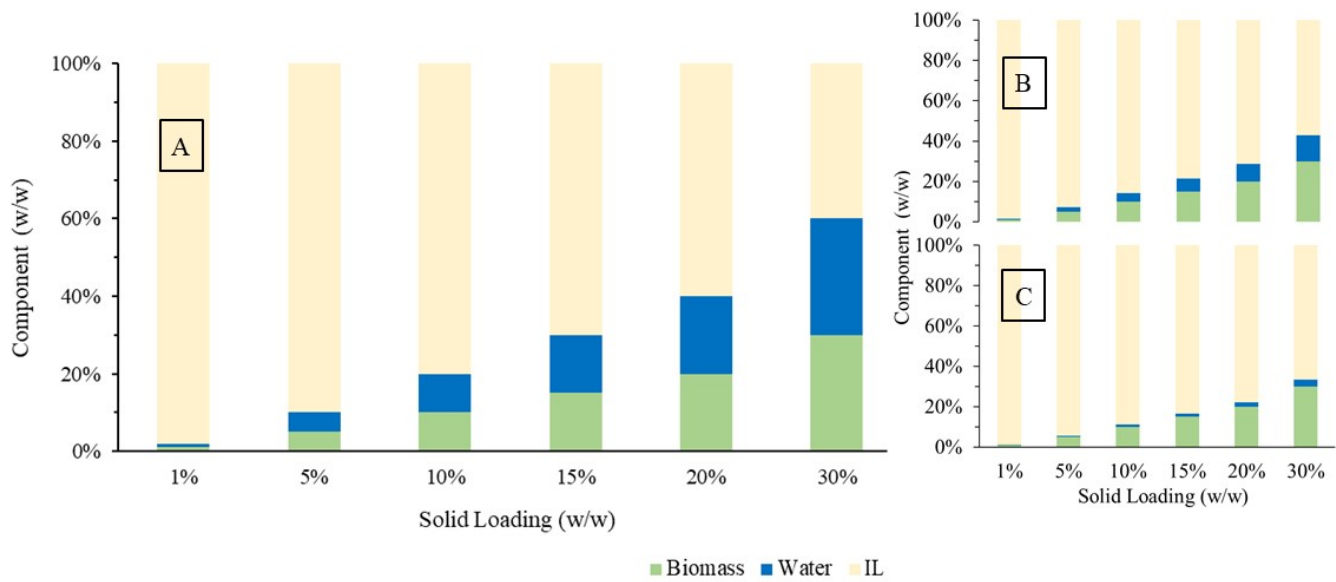


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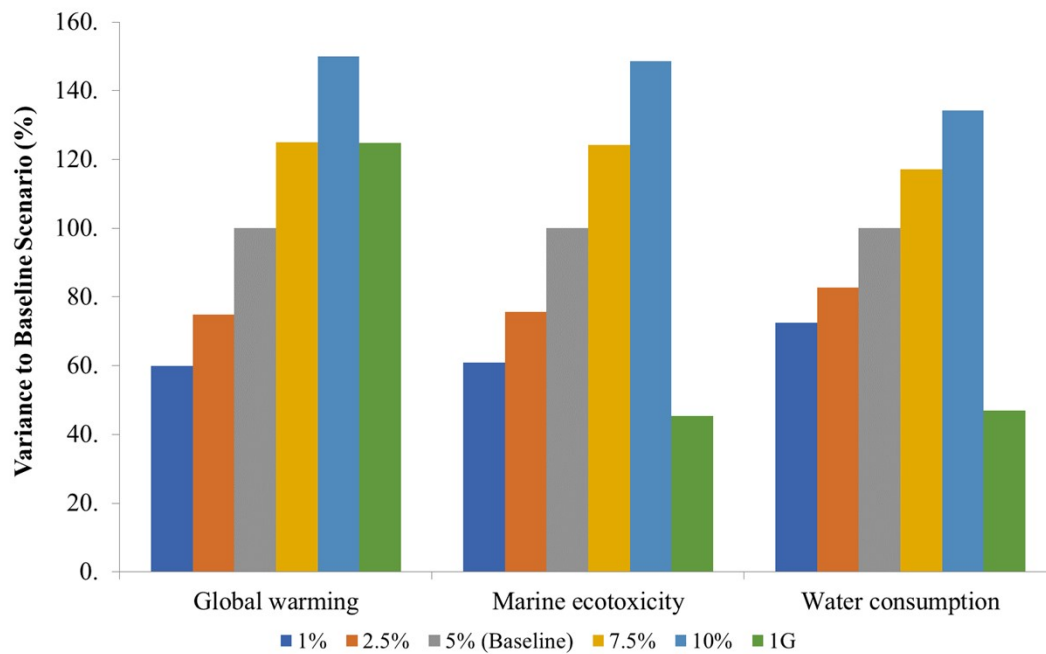


Fig S2: Ionic liquid make-up sensibility analysis (Off-Season operation)

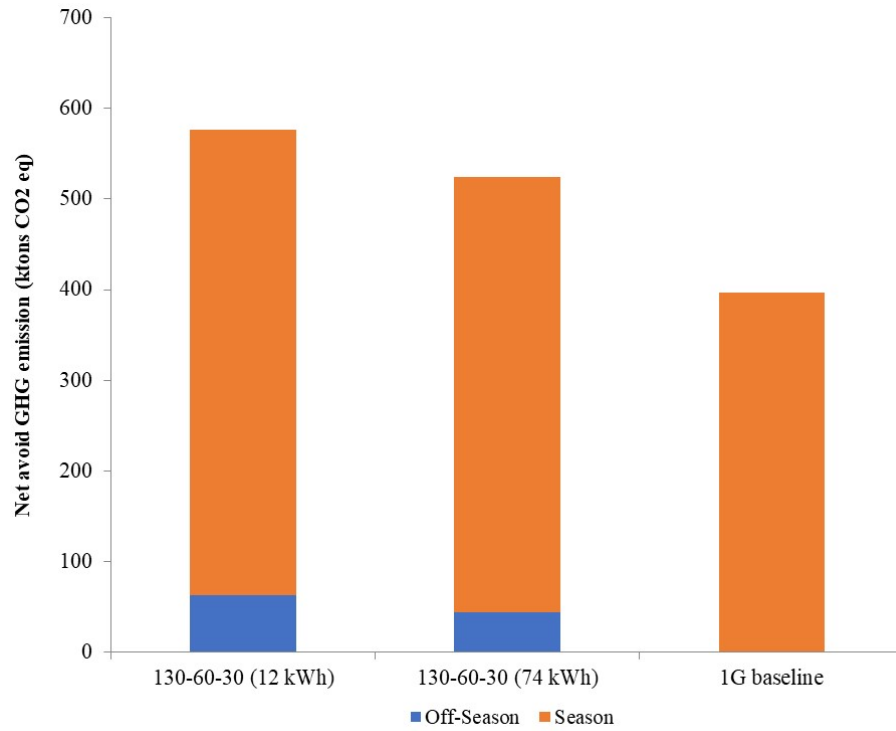


Fig S3: Global warming mitigation capacity for the same sugarcane stalk crushing capacity

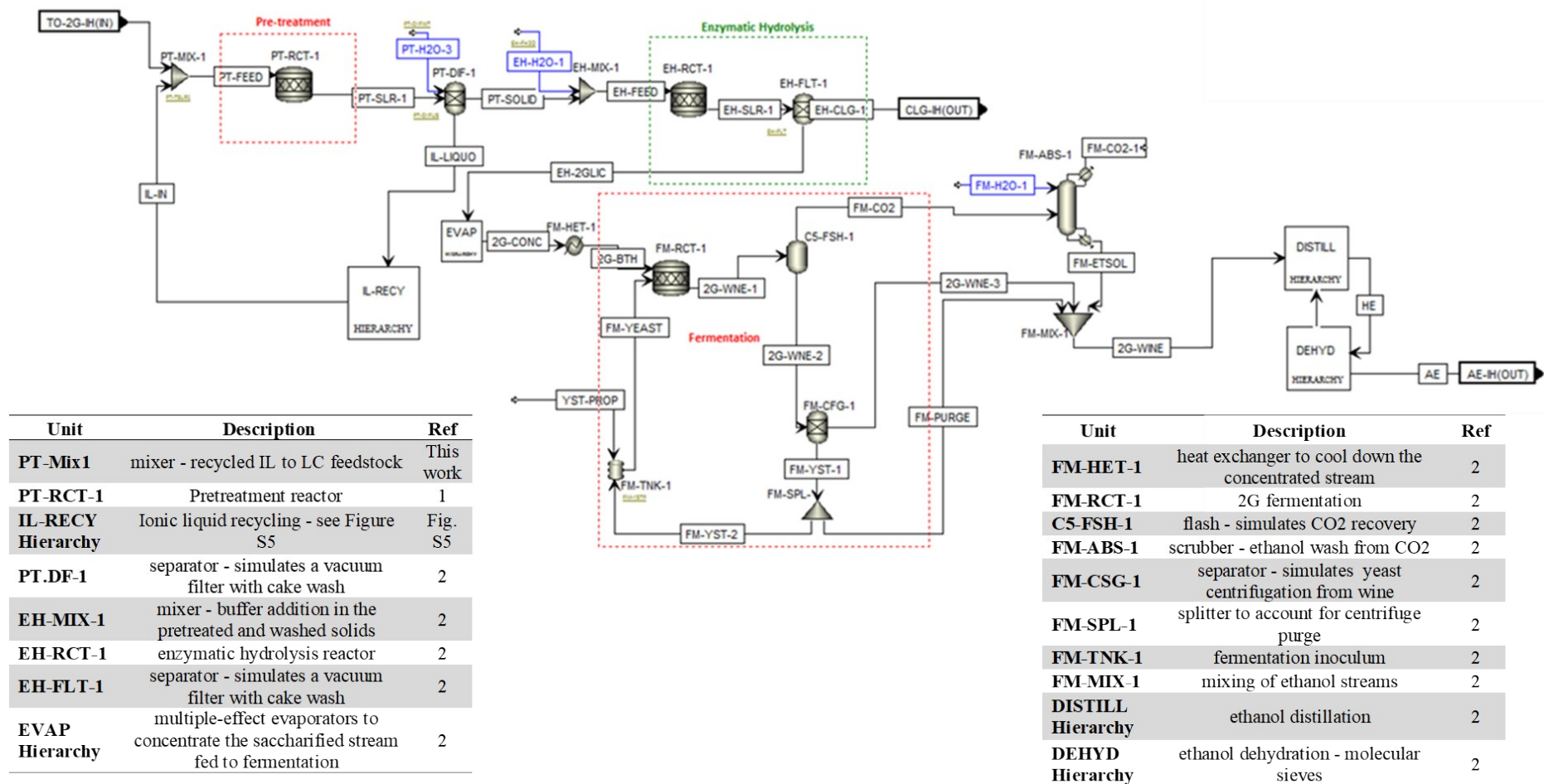
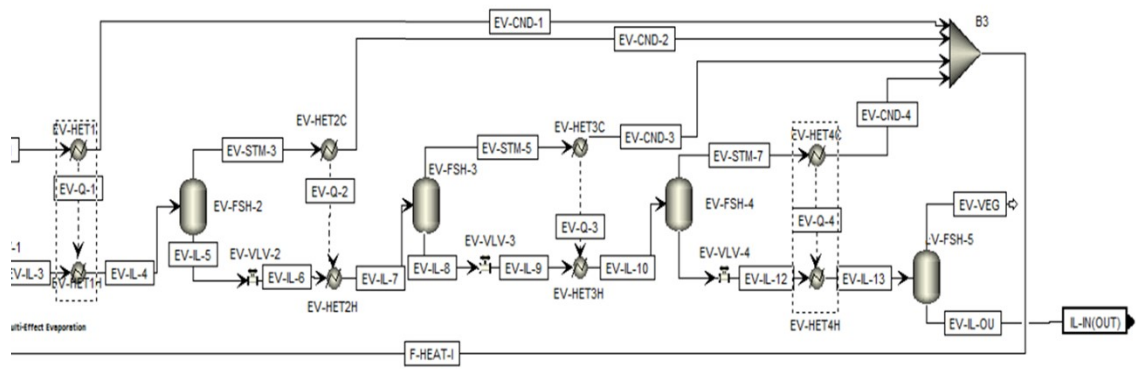


Fig S4: 2G facility used in simulations



Utility Evaporation

B3

L-IN(OUT)

Fig S5: IL recycle hierarchy.

References

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