Efficient Conversion of Aqueous-Waste-Carbon Compounds into Electrons, Hydrogen, and Chemicals via Separations and Microbial Electrocatalysis

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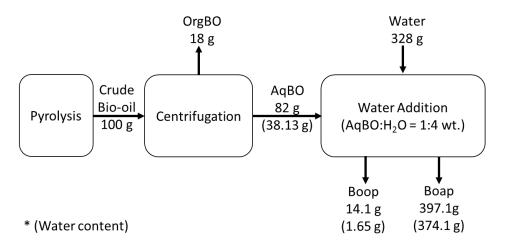


Figure S1. Mass-balance diagram for the water addition experiment (1:4 wt. ratio of AqBO to water; the mass of water is shown in parentheses). Figure reprinted with permission from Park et al., 2016. Copyright (2016) American chemical society.

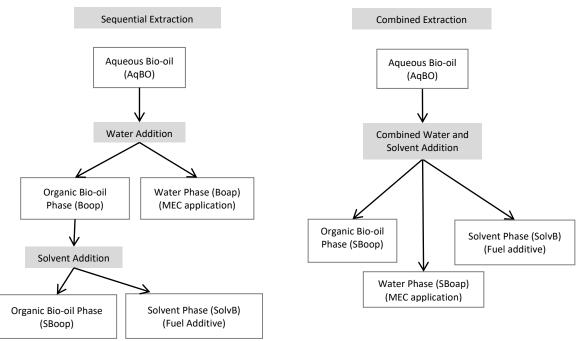


Figure S2. Flow charts for sequential and combined extraction. Figure reprinted with permission from Park et al., 2016. Copyright (2016) American chemical society.

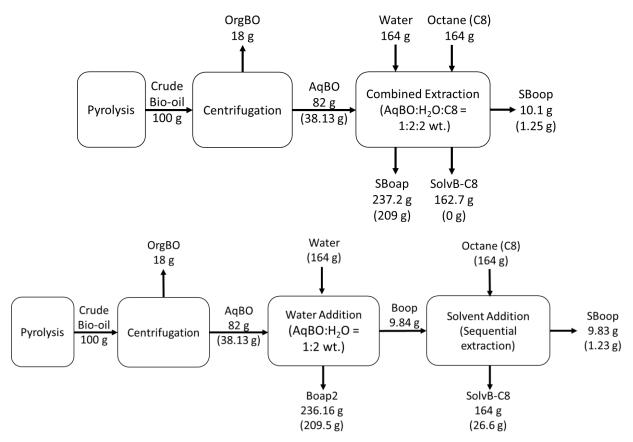


Figure S3. Mass-balance diagrams for combined (top) and sequential (bottom) extraction with hexadecane and octane, respectively. (The mass of water is shown in parentheses). Figure reprinted with permission from Park et al., 2016. Copyright (2016) American chemical society.

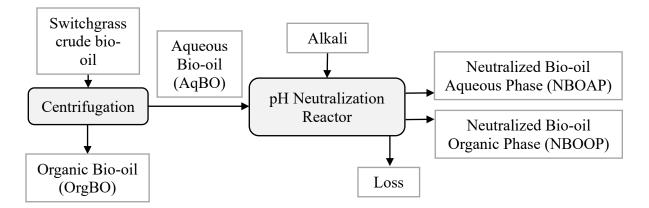


Figure S4. Schematic of pH neutralization of AqBO from switchgrass crude bio-oil. Figure reprinted with permission from Park et al., 2017, Copyright (2017) American Chemical Society.

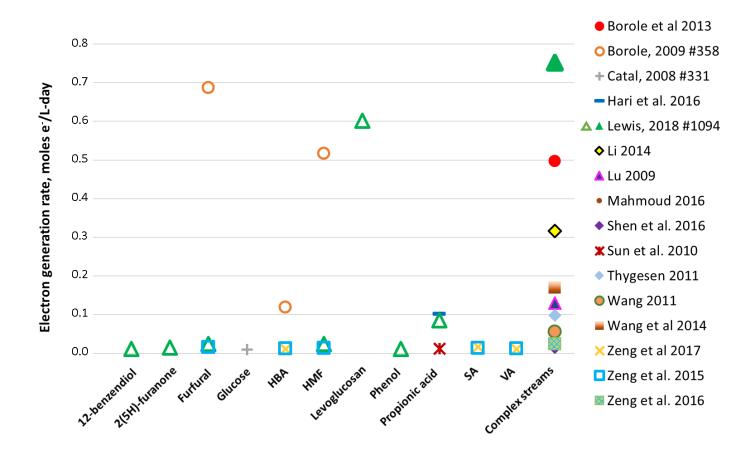


Figure S5. Electron generation rates for biomass-related compounds and complex biomass streams reported in the literature. Y-axis unit are moles of electrons per liter of anode per day.