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Sustainability Assessment of Renewable Fuels Production

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Message from the Guest Editors

This Special Issue invites scientists to share their research results with regard to the sustainability assessment of renewable fuels production processes. Life Cycle Assessment (LCA) constitutes a valuable tool identifying the environmental merits and demerits of renewable fuel production pathways throughout their life cycle ("cradle-to-grave" approach). Consequently, LCA is commonly applied for the environmental assessment of renewable fuels, originating from variant feedstocks aiming to increase energy efficiency and sustainability. The research in the environmental assessment of renewable fuels is continuous and intense, and we therefore welcome contributions valorizing non-food crops and algal biomass, while biorefinery concepts cogenerating bioenergy and biochemicals are also envisioned. This Special Issue aims to present and disseminate the most recent advances of original research studies and reviews regarding the environmental characterization of renewable fuels production processes towards sustainable transportation focusing on residual biomass and bio-based feedstock valorization. Overviews of collaborative research projects in this area are also welcomed.