

Supplementary Information

Economic Process Evaluation and Environmental Life-Cycle Assessment of bio-aromatics production

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List of files

Supplementary_1_Calculations_results.xlsx – Contains modelling calculations, LCA inventory, and results

Provided on the following website: <https://www.ufz.de/index.php?en=42204>

Supplementary_2_reference_system_chemical_synthesis.spf – The SuperPro model of the reference system: the Kolbe-Schmitt reaction

Supplementary_3_bacterial_base_case.spf – The base scenario of the bacterial process with cane sugar substrate

Supplementary_4_bacterial_base_case_biomass_recycling.spf – The base scenario with biomass recycling with cane sugar substrate

Supplementary_5_bacterial_base_case_water_recycling.spf – The base scenario with water recycling with cane sugar substrate

Supplementary_6_bacterial_best_case_cane_sugar.spf – The base scenario with both water and biomass recycling and with cane sugar substrate

Supplementary_7_bacterial_best_case_cane_sugar_upscaled.spf – The base scenario with both water and biomass recycling and with cane sugar substrate and with fivefold of base production

Supplementary_8_bacterial_best_case_beet_sugar_upscaled.spf – The base scenario with both water and biomass recycling and with beet sugar substrate and with fivefold of base production

Supplementary_9_yeast_base_case.spf – The base scenario with yeast

Supplementary_10_yeast_best_case_cane_sugar_upscaled.spf – The base scenario with yeast with both water and biomass recycling and with cane sugar substrate and with fivefold of base production

Supplementary_11_yeast_best_case_beet_sugar_upscaled.spf – The base scenario with both water and biomass recycling and with beet sugar substrate and with fivefold of base production