

Table S1. Net heating values and total price of products at different ratios (w/w) of press cake used for butanol production and electricity generation via combustion

Parameter	Ratio of press cake for butanol production: electricity generation via combustion (w/w)				
	100:0	70:30	50:50	30:70	0:100
Butanol production					
Press cake (ton wet)	1.53	1.071	0.765	0.459	0
Alkali-pretreated (ton dry)	0.30	0.21	0.15	0.09	0
Butanol production (kg)	10.20	7.14	5.10	3.06	0
LHV (MJ)	351	246	175	105	0
Fuel butanol (USD)	16	11	8	5	0
Chemical butanol (USD)	225	157	112	67	0
Electricity generation via combustion					
Press cake (ton wet)	0	0.459	0.765	1.071	1.53
Net LHV (MJ)	0	2831	4719	6606	9438
Electricity generation (kWh)	0	260	433	606	865
Price (USD)	0	25	42	58	83
Total price (electricity + fuel butanol) (USD)	16	36	50	63	83
Total price (electricity + chemical butanol) (USD)	225	182	154	126	83