

Project:	Sousel Biomethane Project			
Prepared by:	BW	Document Title: ELECTRICAL CONSUMERS LIST	Revision:	E
Checked by:			Scale:	---
Approved by:		Document Number: A01-LPE-UNT-000-000-ELE-LST-0001_00	Paper Size:	A3
Date:	09/07/2025			



0	BW	First Edition
Rev.	Prepared	Description

TAG	Building	Component	Quantity	Nominal Power per unit (kW)	Nominal Power (kW)	Power Demand (kW)	Operating hours (h/year)	Energy Consumption (kWh/y)	Variable Speed
	E	Crane	1	61,0	61	36,6	8030	293 898	No
L1101-L1102 L1105-L1106	E	Biomixer	2	67,5	135	114,75	4836	554 876	Yes
G1101/G1103/ P1101/P1102	E	Pre-mix	2	35,4	70,8	49,56	4836	239 648	Yes
G1102/G1104	E	Macerator - diluted solids	2	16,5	33	23,1	4836	111 701	Yes
P2003/P2004	E	Pump - recirculation of digestate T6 for solid premix	2	11,0	22	17,6	4836	85 105	Yes
G1001-G1002 P1001-P1002	D	Macerator + pump - liquid manure	2	18,5	37	25,9	4030	104 367	Yes
P1003A/P1003S P1004-P1005	D+E	Pump from T2 to Digester	3	5,5	16,5	13,2	8030	105 996	Yes
MT1001	Ext	T1 mixer - liquid manure reception tank	1	4,0	4	2,8	8030	22 484	No
MT1004	Ext	T2 mixer - liquid manure storage tank	2	15,0	30	21	8030	168 630	No
MT2001-MT004	Ext	D1-D4 - Digesters Mixers	4	37	148	88,8	8030	713 064	No
	Ext	Condensate well with submersible pump	3	2,8	8,4	5,88	8030	47 216	No
P2002A/P2002B	E	Pump digestate to HE2 - Digester Heating	1	11,0	11	7,7	8030	61 831	Yes
	F	Anti-foaming dosing pump	2	1,5	3	2,4	1410	3 385	No
MT2101-MT2103	B	Mixer hygienization tank	3	11,0	33	23,1	8030	185 493	No
P2001A/P2001S P2005A/P2005S P2101-P2106 P2201A/P2201S	F/E	Pump from digester from/to hygienization and to E1003	14	11,0	154	123,2	8030	989 296	Yes
P2202-P2204	F	Pump from digester from/to hygienization and to E1003/T3001	3	11,0	33	26,4	8030	211 992	Yes
P3001/P3002	D	Pump T3 to screw press	2	15,0	30	21	2686	56 414	Yes
P3101/P3102	D	Pump T4 to Decanters	2	15,0	30	24	2686	64 474	Yes
P3103	D	Pump T4 to T5	1	37,0	37	29,6	168	4 970	Yes
P3201A/P3201S	D	Pump T5 to T6	1	30,0	30	24	2686	64 474	Yes
P3301A/P3301S	D	Pump T6 to T7	1	15,0	15	12	4030	48 355	Yes
P3302A/P3302S	D	Pump T6 to Digester	1	7,5	7,5	6	8030	48 180	Yes
P3303A/P3303S	D	Pump T3 to T8	1	15,0	15	12	4030	48 355	Yes
P2303A / P2303S	F	Heat loop pump	2	6,0	12	8,4	4030	33 849	Yes
P2204	F	Heat pump A condenser pump	1	6,0	6	4,2	4030	16 924	Yes
P2205	F	Heat pump A evaporator pump	1	6,0	6	4,2	4030	16 924	Yes

TAG	Building	Component	Quantity	Nominal Power per unit (kW)	Nominal Power (kW)	Power Demand (kW)	Operating hours (h/year)	Energy Consumption (kWh/y)	Variable Speed
P2206	F	Heat pump B condenser pump	1	6,0	6	4,2	4030	16 924	Yes
P2207	F	Heat pump B condenser pump	1	6,0	6	4,2	4030	16 924	Yes
P2308A / P2308S	F	Boiler pump	2	6,0	12	8,4	4030	33 849	Yes
P2309A / P2309S	F	Digester heating water pump	2	6,0	12	8,4	4030	33 849	Yes
P2310A / P2310S	F	Hygienization water pump	2	6,0	12	8,4	4030	33 849	Yes
	H	Belt conveyers - from screw press to B4	2	6,0	12	7,2	4030	29 013	Yes
	H	Screw conveyor - from decanter to B4	1	6,0	6	3,6	4030	14 507	Yes
	H	Belt conveyor - from decanter to B4	1	6,0	6	3,6	4030	14 507	Yes
MT3301	Ext	T6 mixer	2	15,0	30	21	8030	168 630	No
MT3302	Ext	T7 mixer	1	4,0	4	2,8	8030	22 484	No
S3201/S3202	H	Centrifuges	2	121	242	169,4	2686	455 076	Yes
S3101/S3102	H	Screw press	2	22,0	44	30,8	2686	82 741	No
MT3303	Ext	T8 mixer	1	4,0	4	2,8	8030	22 484	No
MT3001	Ext	T3 mixer	4	30	120	84	8030	674 520	No
MT4001	Ext	T9 mixer	4	30	120	84	8030	674 520	No
MT4002	Ext	T10 mixer	4	30	120	84	8030	674 520	No
MT4003	Ext	T11 mixer	4	30	120	84	8030	674 520	No
P4001A/P4001S	H	Pump T3 to T9/T10/T11	2	11,0	22	15,4	4015	61 831	Yes
P4002A/P4002S	H	Pump T9/T10/T11 to T3	2	11,0	22	15,4	4015	61 831	Yes
	Ext	Blowers	3	5,0	15	9,75	8030	78 293	No
	Ext	Scrubber	1	46	46	39,1	8030	313 973	No
	Ext	BUP + Pre-treatment	1	1310	1310	1113,5	8030	8 941 405	No
	J1 (Ext)	Flare 1	1	15	15	12,75	365	4 654	No
	Ext	Compressor CNG	1	200	200	170	8030	1 365 100	No
HP2301/HP2302	F	Heat Pump	2	388	776	582	8030	4 673 460	No
P2301A/P2301S	F	From Heat Pump to E2001/E2105 - hot water	1	15	15	11,25	8030	90 338	Yes
P2302A/P2302S	F	From Heat Pump to E2103/E2104 - hot water	1	9	9,2	6,9	8030	55 407	Yes
P2303	F	Heat circuit - cold water	1	30	30	22,5	8030	180 675	Yes
P2304A/P2304S	F	From Heat Pump to E2201 - cold water	1	15	15	11,25	8030	90 338	Yes
P2305	F	Heat circuit - hot water	1	15	15	11,25	8030	90 338	Yes
	F	CIP Pump and dosing	2	1,1	2,2	1,87	730	1 365	No
	E	Compressed air system	1	10,0	10	8,5	8030	68 255	No
	I (Ext)	Desodorization system	1	74,0	74	51,8	8030	415 954	No
	J2 (Ext)	Flare 2	1	0,5	0,5	0,25	8030	2 008	No
H2302	Ext	Boiler	1	5,5	5,5	5,225	365	1 907	No
					4 441	3 421		24 438 032	

REGAENERGY reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden.