Table S1. The table below shows the data related to PCC, collected from the literature.

Absorber Temperature (ºC)	Stripper Pressure (KPa)	Lean CO_2 Loading	Solvent Name	Solvent Concentration	Absorber Stages	Absorber Diameter (m)	Absorber packed height (m)	Stripper stages	Stripper Diameter (m)	Stripper packed height (m)	% of CO_2 captured	Energy for regeneration MJ/Kg CO_2	Fuel	Ref.
40	200	0.250	MEA	0.35	20	0.350	7.136	20	0.250	7.168	99	3.1	Coal	[1]
40	190	0.200	MEA	0.30	20	0.330	9.200	20	0.280	4.300	90	3.2	Coal	[2]
48	200	0.262	MEA	0.30	20	-	-	16	-	-	90	3.8	Natural Gas	[3]
40	250	0.160	MEA	0.30	-	0.810	12.190	-	0.660	9.750	90	3.50	Coal	[4]
40	-	0.240	PZ	0.48	-	-	-	-	-	-	-	2.51	Coal	[5]
35	-	0.240	PZ	0.30	-	-	-	-	-	-	-	2.36	Coal	[5]
39	-	-	MEA	0.30	-	-	-	-	-	-	90	5.34	Natural Gas	[6]
39	165	0.200	PZ	0.30	-	12.500	20.00	-	8.000	20.000	90	3.56	Natural Gas	[6]
39	165	0.200	PZ	0.40	-	12.500	20.00	-	8.000	20.000	90	2.76	Natural Gas	[6]
40	240	1.005	PZ/K2CO3	0.50	20	20.0	15.0	12	20.0	9.0	90	3.30	Coal	[7]
40	140	0.200	PZ	0.40	Non	Non	36.0	10	Non	Non	90	2.9	Coal	[7]
40	185	0.124	PZ	0.30	-	1.100	17.000	-	1.100	10.000	90	3.5	Coal	[8]
40	181	0.1125	EEMPA (water-lean)	0.99	10	20.000	21.000	10	10.000	12.000	90	2.3	Coal	[9]
35	175	0.40	MEA	0.30	-	3.000	24.000	-	1.300	8.000	90	-	Natural Gas	[10]
35	175	0.10	MEA	0.30	-	3.000	24.000	-	1.300	8.000	60	-	Natural Gas	[10]
40	190	0.24	MEA	0.30	12	-	-	-	-	-	90	3.61	Coal	[11]

Absorber Temperature (ºC)	**Stripper Pressure (KPa)**	**Lean CO_2 Loading**	**Solvent Name**	**Solvent Concentration**	**Absorber Stages**	**Absorber Diameter (m)**	**Absorber packed height (m)**	**Stripper stages**	**Stripper Diameter (m)**	**Stripper packed height (m)**	**% of CO_2 captured**	**Energy for regeneration MJ/Kg CO_2**	**Fuel**	**Ref.**
40	202.65	-	MEA	0.30	20	-	11.190	39	-	13.500	95	3.23	biogas	[12]
40	202.65	-	MEA	0.30	48	-	11.500	25	-	3.450	95	2.95	Coal	[12]
40	202.65	-	MEA	0.30	20	-	12.000	31	-	13.500	95	3.12	non-associated natural gas	[12]
40	202.65	-	MEA	0.30	19	-	8.000	17	-	12.000	95	3.02	associated natural gas	[12]
40	200	0.1488	MDEA-PZ	0.30	20	22.000	35.000	20	12.000	15.000	90	2.69	Coal	[13]
40	200	0.1488	MDEA-PZ	0.40	20	22.000	35.000	20	12.000	15.000	94	2.82	Coal	[13]
40	100	-	K2Sol (Water-lean)	0.60	-	-	-	-	-	-	-	2.8	-	[14]
40	129	-	MEA	0.30	-	-	-	-	-	-	-	4.3	-	[14]
40	-	0.28	MEA	0.325	-	0.430	6.100	-	-	-	93.85	-	-	[14]
39	-	0.231	MEA	0.325	-	0.430	6.100	-	-	-	70.95	-	-	[14]
40	180	0.215	MEA	0.300	-	13.000	20.000	-	17.000	22.000	90	-	Coal	[15]
40	-	-	MEA	0.300	-	-	-	-	-	-	-	3.6	Coal	[16]
40	-	-	HNC-5	0.300	-	-	-	-	-	-	-	3.00	Coal	[16]
40		0.200	MEA	0.300	20	14.770	10.000	20	8.870	15.000	90	3.994	Coal	[17]
	220	0.240	MEA	-	-	-	-	-	-	-	90	-	Coal	[18]
38	345	0.250	MEA	0.300	25	8.000	44.000	20	3.000	43.000	90	2.66	Natural Gas	[19]

Absorber Temperature (°C)	Stripper Pressure (KPa)	Lean CO_2 Loading	Solvent Name	Solvent Concentration	Absorber Stages	Absorber Diameter (m)	Absorber packed height (m)	Stripper stages	Stripper Diameter (m)	Stripper packed height (m)	% of CO_2 captured	Energy for regeneration MJ/Kg CO_2	Fuel	Ref.
38	345	0.140	MDEA-PZ	0.300	-	11.000	44.000	-	3.000	43.000	90	2.54	Natural Gas	[19]
40	200	0.219	MEA	0.300	-	1.100	10.100	-	1.100	17.000	90	2.54	Coal	[20]
40	200	-	PZ	0.376	-	-	12.000	-	-	8.000	90	3.00	Coal	[21]
40	200	-	MEA	0.300	-	-	12.000	-	-	8.000	90	3.68	Coal	[21]
40	-	0.220	PZ	0.300	-	-	-	-	-	-	90	-	Coal	[22]
40	130	0.040	MDEA-PZ	0.450	15	-	-	-	-	-	90	3.70	-	[23]
40	150	0.040	MDEA-PZ	0.450	15	-	-	-	-	-	90	3.40	-	[23]
40	210	0.100	MDEA-PZ	0.300	15	-	-	-	-	-	90	2.74	-	[23]
40	210	0.100	MDEA-PZ	0.300	15	-	-	-	-	-	90	2.24	-	[23]

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