

Table S4. Estimation results of the theoretical CO₂ storage capacity for the Suliszewo structure in separate ten layers of the reservoir level.

No	Mean depth [m]	Geometric volume of layer V_{trap} [Mm ³]	Pressure P_i [MPa]	Temperature T [°C]	CO ₂ density in reservoir conditions ρ_{CO_2} [kg/m ³]	Theoretical Storage capacity M_{CSLF} [Mt CO ₂]	Brine initial density ϱ_0 [kg/m ³]	CO ₂ saturate brine density ϱ_s [kg/m ³]	Capacity of CO ₂ dissolved in water M_R [Mt CO ₂]
1	1328	1114.12	13.06	62.52	478.59	96.30	1009.30	1261.63	2.25
2	1343	401.66	13.20	63.03	481.60	35.38			0.82
3	1349	207.05	13.26	63.24	516.62	16.22			0.35
4	1356	582.89	13.33	63.50	525.98	59.66			1.27
5	1366	375.83	13.42	63.83	530.55	33.90			0.71
6	1375	569.97	13.51	64.15	545.99	57.33			1.17
7	1384	336.64	13.60	64.45	547.86	9.84			0.20
8	1390	297.90	13.66	64.67	548.78	26.06			0.53
9	1395	220.43	13.71	64.84	549.68	4.45			0.09
10	1402	504.95	13.78	65.09	552.01	43.45			0.88
Total						382.59			8.28