

Economic evaluation of the project Luena

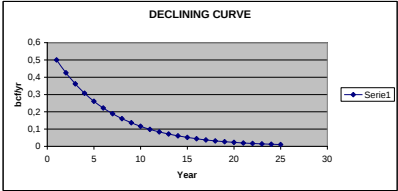
Economic evolution of the project Luena																											
OPEX VARIATION 5																											
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
Sales (\$)	5.000.000	4.250.000	3.612.500	3.070.625	2.610.031	2.218.527	1.885.748	1.602.885	1.362.453	1.158.085	984.372	836.716	711.209	604.527	513.848	436.771	371.255	315.567	268.232	227.997	193.798	164.728	140.019	119.016	101.164	6.082.139	
Operating expenditures (\$)	1.500.000	1.287.750	1.105.533	949.100	814.803	699.508	600.528	515.553	442.602	379.974	326.208	280.049	240.422	206.403	177.197	152.123	130.598	112.118	96.254	82.634	70.941	60.903	52.285	44.887	38.535	756.112	
MARGEN DE CONTRIBUCIÓN	3.500.000	2.962.250	2.506.967	2.121.525	1.795.229	1.519.018	1.285.220	1.087.332	919.850	778.111	658.164	556.667	470.786	398.125	336.652	284.648	240.658	203.449	171.979	145.364	122.857	103.825	87.734	74.129	62.628	5.326.027	
Amortization	2.727.273	2.454.545	2.181.818	1.909.091	1.636.364	1.363.636	1.090.909	818.182	545.455	272.727																15.000.000	
BAT	772.727	507.705	325.148	212.434	158.865	155.382	194.311	269.150	374.395	79	505.383	39	698.164	556.667	470.786	398.125	336.652	284.648	240.658	203.449	171.979	145.364	122.857	103.825	87.734	74.129	62.628
Depletion factor	369.051	203.082	130.059	84.973	63.546	62.153	77.724	107.660	149.758	202.153	263.366	222.667	198.315	159.250	134.661	113.859	96.393	81.380	68.791	58.145	48.143	41.530	35.050	29.652	25.051	1.433.430	
Compensation from previous years																											
Taxable corporation tax	463.636	304.623	195.089	127.460	95.319	93.229	115.595	161.490	224.637	303.230	394.899	334.000	262.472	238.875	201.991	170.789	144.395	122.069	103.187	87.218	73.714	62.295	52.640	44.478	37.577	2.150.144	
Corporate Tax (25%)	162.773	106.618	68.281	44.611	33.362	32.630	40.805	56.522	78.623	106.131	138.215	116.900	98.865	83.606	70.687	59.776	50.538	42.714	36.115	30.526	25.860	21.803	18.424	15.567	13.152	1.552.565	
RESULTADO DEL EJERCICIO	615.455	401.087	256.867	167.823	125.503	122.752	153.506	212.629	295.773	399.253	519.950	439.767	371.921	314.519	265.955	224.872	190.119	160.725	135.863	114.837	97.057	82.022	69.310	58.562	49.476	2.329.323	

Net cash flow	3.337.727	2.855.632	2.438.685	2.076.914	1.761.867	1.486.388	1.244.415	1.030.811	841.227	671.980	519.950	439.767	371.921	314.519	265.955	224.872	190.119	160.725	135.863	114.837	97.057	82.022	69.310	58.562	49.476	20.840.600
Operating cash flow	3.500.000	2.962.250	2.506.967	2.121.525	1.795.229	1.519.018	1.285.220	1.087.332	919.850	778.111	658.164	556.667	470.786	398.125	336.652	284.648	240.658	203.449	171.979	145.364	122.857	103.825	87.734	74.129	62.628	22.393.165
Capital expenditure (CAPEX)	15.000.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.000.000
CASH FLOW	3.337.727	2.855.632	2.438.685	2.076.914	1.761.867	1.486.388	1.244.415	1.030.811	841.227	671.980	519.950	439.767	371.921	314.519	265.955	224.872	190.119	160.725	135.863	114.837	97.057	82.022	69.310	58.562	49.476	5.840.600
DISCOUNTED (5%)	3.178.788	2.590.142	2.106.618	1.708.682	1.380.469	1.109.156	884.382	697.693	542.263	412.538	304.004	244.679	197.238	155.853	127.929	103.018	82.949	66.764	53.766	43.351	34.638	28.039	22.565	18.158	14.011	

NPV 1.111.660
IRR (%) 6,61

CUMULATIVE CASH FLOW	-15.000.000	-11.662.273	-8.806.641	-6.367.955	-4.291.042	-2.529.175	-1.042.787	201.629	1.232.439	2.073.666	2.745.646	3.265.596	3.705.363	4.077.284	4.391.803	4.657.758	4.882.629	5.072.749	5.233.473	5.369.339	5.484.174	5.581.230	5.663.252	5.732.562	5.791.124	5.840.600
CUMULATIVE CASH FLOW DISCOUNTED	-15.000.000	-11.821.212	-9.072.130	-6.700.012	-4.659.273	-2.910.573	-1.420.009	-158.404	899.321	1.774.701	2.486.204	3.049.650	3.510.475	3.902.601	4.236.137	4.519.732	4.760.774	4.965.578	5.139.533	5.287.239	5.412.617	5.519.011	5.609.270	5.685.818	5.750.720	5.805.735

PAYBACK (yr) 5
DISCOUNTED PAYBACK (yr) 5



INCOME SALES (\$)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
bcd	0.5	0.425	0.36125	0.3070625	0.261003125	0.221852656	0.188574758	0.160288544	0.136245263	0.115808473	0.098437202	0.083671622	0.071120879	0.060452747	0.051384835	0.04367711	0.03712554	0.031557	0.026823	0.0228	0.01938	0.016473	0.014002	0.011902	0.010116
MMBTU	500000	425000	361250	307062.5	261003.125	221852.6563	188574.7578	160288.5441	136245.2625	115808.4731	98437.20217	83671.62184	71120.87857	60452.74678	51384.83477	43677.10955	37125.5431	31556.1	26823.2	22799.72	19379.77	16472.8	14001.88	11901.6	10116.36
Ingress (LOS/MMBTU)	5000000	4250000	3612500	3070625	2610031.25	2218526.563	1885747.578	1602886.441	1362452.625	1158084.731	984372.0217	836716.2184	711208.7857	604527.4678	513848.3477	436771.0955	371255.431	315567.1	268232	227997.2	193797.7	164728	140018.8	119016	101163.6
Operating cost (\$/Mcf)	3	3.03	3.0603	3.090903	3.12181203	3.15303015	3.184560452	3.216406056	3.248570117	3.281055818	3.313866376	3.34700504	3.38047509	3.414279841	3.44842264	3.482906866	3.51773593	3.552913	3.588442	3.624327	3.66057	3.697176	3.734148	3.771489	3.809204
Total operating cost (\$)	1500000	1287750	1105533.375	949100.4024	814802.6955	699508.1141	600527.7159	515553.0441	442602.2884	379974.0646	326207.7344	280049.34	240422.3584	206402.5947	177196.6275	152123.3047	130997.857	112118.3	96253.53	82633.65	70940.99	60902.84	52285.09	44886.75	38535.27

