

FLUJO DE FONDOS ALTERNATIVA 2

Zona Metropolitana de Mendoza

Flujo de Fondos en dólares

Incremento en dólares del 2% anual (Tasa LIBOR)

Descripción	Año 0	Año 1	Año 2	Año 3	Año 4	Año 5	Año 6	Año 7	Año 8	Año 9	Año 10	Año 11	Año 12	Año 13	Año 14	Año 15	Año 16	Año 17	Año 18	Año 19	Año 20
BENEFICIOS																					
TOTAL BENEFICIOS		15,262,413.93	15,812,844.65	16,077,801.75	16,348,208.17	16,624,161.41	16,905,710.31	17,192,908.77	17,485,815.13	17,780,765.58	18,084,403.64	18,393,724.45	18,702,590.19	19,016,208.33	19,334,730.67	19,656,883.56	19,984,039.69	20,317,214.87	22,121,356.83	22,614,007.84	23,118,914.78
<i>Disposición a Pagar (beneficio social)</i>		14,628,201.38	15,069,973.07	15,220,672.80	15,372,879.52	15,526,608.32	15,681,874.40	15,838,693.15	15,997,080.08	16,157,050.88	16,318,621.39	16,481,807.60	16,646,625.68	16,813,091.93	16,981,222.85	17,151,035.08	17,322,545.43	17,495,770.89	17,670,728.60	17,847,435.88	18,025,910.24
<i>Venta de Material recuperado (inorgánico)</i>		634,212.55	742,871.58	857,128.95	975,328.65	1,097,553.09	1,223,835.91	1,354,215.62	1,488,735.05	1,623,714.70	1,765,782.25	1,911,916.85	2,055,964.51	2,203,116.40	2,353,507.81	2,505,848.48	2,661,494.25	2,821,443.98	4,450,628.24	4,766,571.96	5,093,004.54
COSTOS																					
TOTAL COSTOS	24,824,621.38	10,366,513.46	10,047,127.00	10,200,646.44	10,352,172.30	10,508,732.82	10,668,330.05	10,831,033.46	10,996,913.02	11,165,831.52	11,338,254.72	11,514,006.97	11,692,402.93	11,874,250.83	12,059,685.49	12,248,239.99	12,440,593.89	12,637,186.82	12,837,434.82	13,042,081.49	13,250,605.81
TOTAL COSTOS INVERSIÓN	24,476,069.49	0.00	0.00	0.00	0.00	0.00	6,734,564.08	0.00	0.00	0.00	0.00	8,754,933.30	0.00	0.00	0.00	0.00	10,505,919.96	0.00	0.00	0.00	0.00
Total Obras de Infraestructura	18,818,645.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Centro Ambiental El Borbollón</i>	16,689,968.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Obra Civil Módulo	5,612,136.73	0.00	0.00	0.00	0.00	0.00	6,734,564.08	0.00	0.00	0.00	0.00	8,754,933.30	0.00	0.00	0.00	0.00	10,505,919.96	0.00	0.00	0.00	0.00
Obra Civil Edificios Compl. y Planta	2,235,981.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Obras Complementarias	4,687,860.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipos móviles de uso general	1,963,673.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Equipos fijos Planta de Sep	2,190,315.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Planta de Maipú</i>	2,128,677.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sector de Transferencia	1,780,125.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ampliación Compostaje	348,551.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Remediación Basurales	5,657,424.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remediación Campo Papa	631,911.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remediación Puente de Hierro	3,541,713.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Remediación Campo Cacheuta	1,483,799.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL COSTOS OPERACIÓN		10,366,513.46	10,047,127.00	10,200,646.44	10,352,172.30	10,508,732.82	10,668,330.05	10,831,033.46	10,996,913.02	11,165,831.52	11,338,254.72	11,514,006.97	11,692,402.93	11,874,250.83	12,059,685.49	12,248,239.99	12,440,593.89	12,637,186.82	12,837,434.82	13,042,081.49	13,250,605.81
<i>Centro Ambiental El Borbollón</i>	4,922,851.02	5,021,308.04	5,121,734.21	5,224,168.89	5,328,652.27	5,435,225.31	5,543,929.82	5,654,808.42	5,767,904.58	5,883,262.68	6,000,927.93	6,120,946.49	6,243,365.42	6,368,232.73	6,495,597.38	6,625,509.33	6,758,019.51	6,893,179.91	7,031,043.50	7,171,664.37	
Operación Módulo disposición final	1,581,396.85	1,613,024.78	1,645,285.28	1,678,190.99	1,711,754.81	1,745,989.90	1,780,909.70	1,816,527.89	1,852,858.45	1,889,915.62	1,927,713.93	1,966,268.21	2,005,593.58	2,045,705.45	2,086,619.56	2,128,351.95	2,170,918.99	2,214,337.37	2,258,624.11	2,303,796.60	
Costos Anuales Generales		1,021,644.23	1,042,077.11	1,062,918.66	1,084,177.03	1,105,860.57	1,127,977.78	1,150,537.34	1,173,548.08	1,197,019.04	1,220,959.43	1,245,378.61	1,270,286.19	1,295,691.91	1,321,605.75	1,348,037.86	1,374,998.62	1,402,498.59	1,430,548.56	1,459,159.54	1,488,342.73
Costos Anuales de Personal		2,319,809.95	2,366,206.15	2,413,530.27	2,461,800.88	2,511,036.89	2,561,257.63	2,612,482.78	2,664,732.44	2,718,027.09	2,772,387.63	2,827,835.38	2,884,392.09	2,942,079.93	3,000,921.53	3,060,939.96	3,122,158.76	3,184,601.94	3,248,293.97	3,313,259.85	3,379,525.05
<i>Planta de Maipú</i>	2,877,128.63	2,406,430.39	2,454,559.00	2,503,650.18	2,553,723.18	2,604,797.64	2,656,893.60	2,710,031.47	2,764,232.10	2,819,516.74	2,875,907.08	2,933,425.22	2,992,093.72	3,051,935.60	3,112,974.31	3,175,233.79	3,238,738.47	3,303,513.24	3,369,583.50	3,436,975.17	
Costos Generales de operación		941,323.26	960,149.73	979,352.72	998,939.78	1,018,918.57	1,039,296.94	1,060,082.88	1,081,284.54	1,102,910.23	1,124,968.43	1,147,467.80	1,170,417.16	1,193,825.50	1,217,702.01	1,242,056.05	1,266,897.17	1,292,235.12	1,318,079.82	1,344,441.42	1,371,330.24
Costos Personal		1,935,805.37	1,974,521.48	2,014,011.91	2,054,292.15	2,095,377.99	2,137,285.55	2,180,031.26	2,223,631.89	2,268,104.52	2,313,466.61	2,359,735.95	2,406,930.67	2,455,069.28	2,504,170.66	2,554,254.08	2,605,339.16	2,657,445.94	2,710,594.86	2,764,806.76	2,820,102.89
Transporte	2,566,533.80	2,619,388.56	2,624,353.24	2,624,353.24	2,626,357.38	2,628,307.09	2,630,210.05	2,632,073.13	2,633,694.83	2,635,475.30	2,637,171.97	2,638,031.23	2,638,791.69	2,639,517.17	2,639,668.30	2,639,850.77	2,640,428.83	2,640,741.68	2,641,454.48	2,641,966.27	
Diferencial Servicio de Recolección		2,558,702.54	2,612,863.96	2,618,574.99	2,618,574.99	2,621,315.81	2,623,992.42	2,626,612.31	2,629,182.27	2,631,705.96	2,634,193.69	2,636,645.58	2,639,070.88	2,641,468.79	2,643,845.31	2,646,182.05	2,648,505.98	2,650,834.14	2,653,142.46	2,655,459.52	2,657,763.18
Diferencial Servicio de Aseo Urbano		7,831.26	6,524.60	5,778.25	5,778.25	5,041.56	4,314.68	3,597.73	2,890.87	1,988.87	1,281.61	526.39	-1,039.65	-2,677.10	-4,328.14	-6,513.75	-8,655.21	-10,405.31	-12,400.78	-14,005.03	-15,796.92
<i>Cantidad de residuos a operar(tn/año)</i>		488,873.61	497,063.27	505,545.56	513,907.41	522,199.70	530,434.90	538,624.26	546,777.94	554,373.97	562,412.60	570,401.46	577,708.88	584,959.31	592,195.06	599,087.72	606,011.80	613,193.30	620,228.44	627,527.60	634,723.37
Costo Unitario por tonelada	21.20	20.21	20.18	20.14	20.12	20.11	20.11	20.11	20.11	20.14	20.16	20.19	20.24	20.30	20.36	20.44	20.53	20.61	20.70	20.78	20.88
Costo Unitario por tonelada con beneficios	19.91	18.72	18.48	18.25	18.02	17.81	17.59	17.39	17.21	17.02	16.83	16.68	16.53	16.39	16.26	16.14	16.01	15.82	15.62	15.42	15.25
RESULTADOS	-24,824,621.38	4,895,900.47	5,765,717.65	5,877,155.31	5,996,035.87	6,115,428.59	6,237,380.26	6,361,875.30	6,488,902.11	6,614,934.07	6,746,148.93	6,879,717.48	7,010,187.25	7,141,957.50	7,275,045.18	7,408,643.57	7,543,445.79	7,680,028.05	9,283,922.01	9,571,926.36	9,868,308.97
Tiempo	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Tasa de descuento 12%

VAN	- 24,824,621	4,895,900	5,765,718	5,877,155	5,996,036	6,115,429	6,237,380	6,361,875	6,488,902	6,614,934	6,746,149	6,879,717	7,010,187	7,141,958	7,275,045	7,408,644	7,543,446	7,680,028	9,283,922	9,571,926	9,868,309
115,938,039.33																					

CONCLUSIONES ALTERNATIVA 1
 Esta Alternativa presenta un **VAN positivo** a la tasa de descuento del 12%.
 La **TIR** de esta alternativa también es **positiva** y supera a la tasa de descuento

TIR 23.81%