

## **5.1 Calculul valorii nete actualizate pentru optiunile analizate**

**ANEXA 5.1 –  
CALCULUL VALORII NETE ACTUALIZATE PENTRU OPTIUNILE ANALIZATE**

## A. Optiuni analizate pentru sectorul de apa

### 1. Sistem de alimentare cu apa Focsani

**Optiunea 1 - Sistemul de alimentare cu apa centralizat Focsani – alimentarea in sistem centralizat din sursa actuala a sistemului Focsani a localitatilor din UAT Focsani, UAT Campineanca, UAT Golesti, UAT Milcovu, UAT Gologanu, UAT Ciorasti, UAT Maicanesti, UAT Nanesti, UAT Tataranu, UAT Vulturii**

Year	Investment		Operating and maintenance costs					Total O&M cost	Total Water Quantity	Financial unit cost per m3
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost			
	Euro	Euro	Euro	Euro	Euro	Euro	Euro	m3	EUR/m3	
2014	-	-					-	-		
2015	-	-					-	-		
2016	1,148,000	287,000					-	-		
2017	6,888,000	1,722,000					-	-		
2018	3,444,000.00	861,000					-	-		
2019	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2020	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2021	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2022	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2023	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2024	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2025	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2026	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2027	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2028	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2029	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2030	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2031	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2032	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2033	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2034	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2035	-	287,000	75,000	135,450	18,864	100,450	329,764	7,500,000		
2036	-	1,722,000	75,000	135,450	18,864	100,450	329,764	7,500,000		
2037	-	861,000	75,000	135,450	18,864	100,450	329,764	7,500,000		
2038	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2039	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2040	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2041	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2042	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
2043	-	-	75,000	135,450	18,864	100,450	329,764	7,500,000		
Resid. Value	(4,305,000)	(1,722,000.00)	-	-	-	-	-	-	-	
NPV at 0%	7,175,000	4,018,000					8,244,100	187,500,000	0.10	
NPV at 5%	8,828,691	3,029,760					3,823,654	86,963,423	0.18	
NPV at 10%	8,229,402	2,366,822					2,044,451	46,498,054	0.27	

**Optiunea 2: Reabilitare si extindere sisteme independente actuale : Ciorasti, Gologanu Maicanesti, Nanesti, Tataranu, Vulturul si executie sisteme independente in localitatile care nu au apa din UAT Vanatori**

Year	Investment		Operating and maintenance costs					Financial cost per m <sup>3</sup> EUR/m <sup>3</sup>	
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost		Total Water Quantity m <sup>3</sup>
	Euro	Euro	Euro	Euro	Euro	Euro	Euro		
2014	-	-					-	-	
2015	-	-					-	-	
2016	615,300	410,200					-	-	
2017	3,691,800	2,461,200					-	-	
2018	1,845,900	1,230,600					-	-	
2019	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2020	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2021	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2022	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2023	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2024	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2025	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2026	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2027	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2028	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2029	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2030	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2031	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2032	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2033	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2034	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2035	-	410,200	375,000	304,086	176,064	92,295	947,445	7,500,000	
2036	-	2,461,200	375,000	304,086	176,064	92,295	947,445	7,500,000	
2037	-	1,230,600	375,000	304,086	176,064	92,295	947,445	7,500,000	
2038	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2039	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2040	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2041	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2042	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
2043	-	-	375,000	304,086	176,064	92,295	947,445	7,500,000	
Resid. Value	(2,307,375.00)	(2,461,200)	-	-	-	-	-	-	
NPV at 0%	3,845,625	5,742,800					23,686,122	187,500,000	0.18
NPV at 5%	4,731,963	4,330,339					10,985,740	86,963,423	0.23
NPV at 10%	4,410,759	3,382,823					5,873,912	46,498,054	0.29

## 2. Sistemul de alimentare cu apa Odobesti

**Optiunea 1:** Sistemul de alimentare cu apa centralizat Odobesti – alimentarea cu apa in sistem centralizat din sursa sistemului actual Odobesti a localitatilor din UAT Odobesti, UAT Brosteni, UAT Vartescoi, UAT Carligele, UAT Cotesti, UAT Urechesti, UAT Popesti

Year	Investment		Operating and maintenance costs					Total Water Quantity m3	Financial unit cost per m3 EUR/m3
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost		
	Euro	Euro	Euro	Euro	Euro	Euro	Euro		
2014	-	-					-	-	
2015	-	-					-	-	
2016	690,880	172,720					-	-	
2017	4,145,280	1,036,320					-	-	
2018	2,072,640.00	518,160					-	-	
2019	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2020	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2021	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2022	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2023	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2024	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2025	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2026	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2027	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2028	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2029	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2030	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2031	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2032	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2033	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2034	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2035	-	172,720	15,000	67,500	18,864	60,452	161,816	1,500,000	
2036	-	1,036,320	15,000	67,500	18,864	60,452	161,816	1,500,000	
2037	-	518,160	15,000	67,500	18,864	60,452	161,816	1,500,000	
2038	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2039	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2040	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2041	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2042	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
2043	-	-	15,000	67,500	18,864	60,452	161,816	1,500,000	
Resid. Value	(2,590,800)	(1,036,320.00)	-	-	-	-	-	-	
NPV at 0%	4,318,000	2,418,080					4,045,400	37,500,000	0.29
NPV at 5%	5,313,211	1,823,345					1,876,276	17,392,685	0.52
NPV at 10%	4,952,551	1,424,381					1,003,217	9,299,611	0.79

**Optiunea 2: Reabilitare si extindere sisteme de alimentare independente actuale : Carligele, Cotesti, Urechesti si executie sisteme independente in localitatile din UAT Brosteni.**

Year	Investment		Operating and maintenance costs					Financial	
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost	Total Water Quantity	unit cost per m3
	Euro	Euro	Euro	Euro	Euro	Euro	Euro	m3	EUR/m3
2014	-	-					-	-	
2015	-	-					-	-	
2016	288,900	192,600					-	-	
2017	1,733,400	1,155,600					-	-	
2018	866,700	577,800					-	-	
2019	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2020	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2021	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2022	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2023	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2024	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2025	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2026	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2027	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2028	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2029	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2030	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2031	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2032	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2033	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2034	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2035	-	192,600	150,000	270,000	150,912	43,335	614,247	1,500,000	
2036	-	1,155,600	150,000	270,000	150,912	43,335	614,247	1,500,000	
2037	-	577,800	150,000	270,000	150,912	43,335	614,247	1,500,000	
2038	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2039	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2040	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2041	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2042	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
2043	-	-	150,000	270,000	150,912	43,335	614,247	1,500,000	
Resid. Value	(1,083,375.00)	(1,155,600)	-	-	-	-	-	-	-
NPV at 0%	1,805,625	2,696,400					15,356,175	37,500,000	0.53
NPV at 5%	2,221,785	2,033,211					7,122,270	17,392,685	0.65
NPV at 10%	2,070,971	1,588,327					3,808,172	9,299,611	0.80

## B. Optiuni analizate pentru sectorul de apa uzata

### 1. Cluster Focsani

Optiunea 1: Statii de epurare independente pentru aglomerarile Focsani, Gologanu, Milcovu, Rastoaca, Vanatori, Cotesti, Carligele;

Year	Investment		Operating and maintenance costs						Financia unit cost per m <sup>3</sup> EUR/m <sup>3</sup>
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Toal O&M cost	Total Water Quantity	
2015	-	-					-	-	
2016	436,200	290,800					-	-	
2017	1,308,600	872,400					-	-	
2018	1,308,600	872,400					-	-	
2019	1,308,600.00	872,400					-	-	
2020	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2021	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2022	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2023	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2024	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2025	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2026	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2027	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2028	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2029	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2030	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2031	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2032	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2033	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2034	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2035	-	290,800	9,600	270,000	113,184	65,430	458,214	960,000	
2036	-	872,400	9,600	270,000	113,184	65,430	458,214	960,000	
2037	-	872,400	9,600	270,000	113,184	65,430	458,214	960,000	
2038	-	872,400	9,600	270,000	113,184	65,430	458,214	960,000	
2039	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2040	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2041	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2042	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2043	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
2044	-	-	9,600	270,000	113,184	65,430	458,214	960,000	
Resid. Value	(1,635,750)	(1,744,800.00)	-	-	-	-	-	-	
NPV at 0%	2,726,250	4,071,200					11,455,350	24,000,000	0.76
NPV at 5%	3,430,898	3,140,874					5,313,048	11,131,318	1.07
NPV at 10%	3,261,253	2,502,384					2,840,808	5,951,751	1.45

**Optiunea 2.:** formarea clusterului Focsani : aglomerarea Focsani, aglomerarea Glogoranu, aglomerarea Milcovu, aglomerarea Rastoaca, aglomerarea Vanatori, aglomerarea Cotesti, aglomerarea Carligele cu epurarea apelor uzate la SEAU Focsani existenta

Year	Investment		Operating and maintenance costs					Financial	
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Toal O&M cost	Total Water Quantity	unit cost
								m3	per m3
	Euro	Euro	Euro	Euro	Euro	Euro	Euro		EUR/m3
2015	-	-					-	-	
2016	226,870	97,230					-	-	
2017	680,610	291,690					-	-	
2018	680,610	291,690					-	-	
2019	680,610	291,690					-	-	
2020	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2021	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2022	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2023	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2024	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2025	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2026	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2027	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2028	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2029	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2030	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2031	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2032	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2033	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2034	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2035	-	97,230	28,800	142,500	12,576	25,928	209,804	960,000	
2036	-	291,690	28,800	142,500	12,576	25,928	209,804	960,000	
2037	-	291,690	28,800	142,500	12,576	25,928	209,804	960,000	
2038	-	291,690	28,800	142,500	12,576	25,928	209,804	960,000	
2039	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2040	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2041	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2042	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2043	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
2044	-	-	28,800	142,500	12,576	25,928	209,804	960,000	
Resid. Value	(850,762.50)	(583,380)	-	-	-	-	-	-	
NPV at 0%	1,417,938	1,361,220					5,245,100	24,000,000	0.33
NPV at 5%	1,784,429	1,050,162					2,432,703	11,131,318	0.47
NPV at 10%	1,696,195	836,681					1,300,730	5,951,751	0.64

## 2. Cluster Adjud

**Optiunea 1:** Statii de epurare pentru fiecare aglomerare :aglomerarea Adjud cu SE Adjud existenta si executie SE Ruginesti pentru aglomerarea Ruginesti

Year	Investment		Operating and maintenance costs					Total Water Quantity m3	Financial unit per m3 EUR/m3
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Toal O&M cost Euro		
	Euro	Euro	Euro	Euro	Euro	Euro	Euro		
2015	-	-					-	-	
2016	68,400	45,600					-	-	
2017	205,200	136,800					-	-	
2018	205,200	136,800					-	-	
2019	205,200.00	136,800					-	-	
2020	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2021	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2022	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2023	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2024	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2025	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2026	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2027	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2028	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2029	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2030	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2031	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2032	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2033	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2034	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2035	-	45,600	5,100	45,000	18,864	10,260	79,224	170,000	
2036	-	136,800	5,100	45,000	18,864	10,260	79,224	170,000	
2037	-	136,800	5,100	45,000	18,864	10,260	79,224	170,000	
2038	-	136,800	5,100	45,000	18,864	10,260	79,224	170,000	
2039	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2040	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2041	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2042	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2043	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
2044	-	-	5,100	45,000	18,864	10,260	79,224	170,000	
Resid. Value	(256,500)	(273,600.00)	-	-	-	-	-	-	
NPV at 0%	427,500	638,400					1,980,600	4,250,000	0.72
NPV at 5%	537,995	492,517					918,612	1,971,171	0.99
NPV at 10%	511,393	392,396					491,168	1,053,956	1.32

**Optiunea 2: Cluster Adjud : colectare apa uzata din aglomerarile Ruginesti si Adjud in SE Adjud existenta.**

Year	Investment		Operating and maintenance costs					Financial	
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost	Total Water Quantity m3	unit cost per m3
	Euro	Euro	Euro	Euro	Euro	Euro	Euro		EUR/m3
2015	-	-					-	-	
2016	35,000	15,000					-	-	
2017	105,000	45,000					-	-	
2018	105,000	45,000					-	-	
2019	105,000	45,000					-	-	
2020	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2021	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2022	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2023	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2024	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2025	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2026	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2027	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2028	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2029	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2030	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2031	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2032	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2033	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2034	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2035	-	15,000	1,700	48,750	6,288	4,000	60,738	170,000	
2036	-	45,000	1,700	48,750	6,288	4,000	60,738	170,000	
2037	-	45,000	1,700	48,750	6,288	4,000	60,738	170,000	
2038	-	45,000	1,700	48,750	6,288	4,000	60,738	170,000	
2039	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2040	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2041	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2042	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2043	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
2044	-	-	1,700	48,750	6,288	4,000	60,738	170,000	
Resid. Value	(131,250.00)	(90,000)	-	-	-	-	-	-	
NPV at 0%	218,750	210,000					1,518,450	4,250,000	0.46
NPV at 5%	275,290	162,012					704,265	1,971,171	0.58
NPV at 10%	261,678	129,078					376,560	1,053,956	0.73

### 3. Cluster Odobesti

#### Optiunea 1: Statii de epurare independente pentru aglomerarile Odobesti, Vartescoiu-Brosteni, Jaristea si Bolotesti

Year	Investment		Operating and maintenance costs						Financial unit
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost	Total Water Quantity	
	Euro	Euro	Euro	Euro	Euro	Euro	Euro	m3	per m3
2015	-	-					-	-	
2016	270,450	180,300					-	-	
2017	811,350	540,900					-	-	
2018	811,350	540,900					-	-	
2019	811,350.00	540,900					-	-	
2020	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2021	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2022	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2023	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2024	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2025	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2026	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2027	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2028	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2029	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2030	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2031	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2032	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2033	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2034	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2035	-	180,300	15,000	135,000	56,592	40,568	247,160	500,000	
2036	-	540,900	15,000	135,000	56,592	40,568	247,160	500,000	
2037	-	540,900	15,000	135,000	56,592	40,568	247,160	500,000	
2038	-	540,900	15,000	135,000	56,592	40,568	247,160	500,000	
2039	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2040	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2041	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2042	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2043	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
2044	-	-	15,000	135,000	56,592	40,568	247,160	500,000	
Resid. Value	(1,014,188)	(1,081,800.00)	-	-	-	-	-	-	-
NPV at 0%	1,690,313	2,524,200					6,178,988	12,500,000	0.83
NPV at 5%	2,127,204	1,947,385					2,865,845	5,797,562	1.20
NPV at 10%	2,022,021	1,551,512					1,532,325	3,099,870	1.65

**Optiunea 2.:** formarea clusterului Odobesti (aglomerarea Odobesti, aglomerarea Vartescoiu-Brosteni, aglomerarea Jaristea, aglomerarea Bolotesti) cu epurarea apelor uzate la SEAU Odobesti existent.

Year	Investment		Operating and maintenance costs					Financial	
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost	Total Water Quantity	unit cost per m <sup>3</sup>
	Euro	Euro	Euro	Euro	Euro	Euro	Euro	m <sup>3</sup>	EUR/m <sup>3</sup>
2015	-	-					-	-	
2016	119,000	51,000					-	-	
2017	357,000	153,000					-	-	
2018	357,000	153,000					-	-	
2019	357,000	153,000					-	-	
2020	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2021	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2022	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2023	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2024	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2025	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2026	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2027	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2028	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2029	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2030	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2031	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2032	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2033	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2034	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2035	-	51,000	5,000	59,250	12,576	13,600	90,426	500,000	
2036	-	153,000	5,000	59,250	12,576	13,600	90,426	500,000	
2037	-	153,000	5,000	59,250	12,576	13,600	90,426	500,000	
2038	-	153,000	5,000	59,250	12,576	13,600	90,426	500,000	
2039	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2040	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2041	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2042	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2043	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
2044	-	-	5,000	59,250	12,576	13,600	90,426	500,000	
Resid. Value	(446,250.00)	(306,000)	-	-	-	-	-	-	
NPV at 0%	743,750	714,000					2,260,650	12,500,000	0.30
NPV at 5%	935,985	550,841					1,048,501	5,797,562	0.44
NPV at 10%	889,704	438,864					560,618	3,099,870	0.61

#### 4. Cluster Panciu

##### Optiunea 1: Statii de epurare independente pentru aglomerarile Panciu, Straoane

Year	Investment		Operating and maintenance costs						Financial unit
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost	Total Water Quantity	
	Euro	Euro	Euro	Euro	Euro	Euro	Euro	m3	EUR/m3
2015	-	-					-	-	
2016	148,200	98,800					-	-	
2017	444,600	296,400					-	-	
2018	444,600	296,400					-	-	
2019	444,600.00	296,400					-	-	
2020	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2021	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2022	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2023	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2024	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2025	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2026	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2027	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2028	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2029	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2030	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2031	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2032	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2033	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2034	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2035	-	98,800	9,000	90,000	37,728	22,230	158,958	300,000	
2036	-	296,400	9,000	90,000	37,728	22,230	158,958	300,000	
2037	-	296,400	9,000	90,000	37,728	22,230	158,958	300,000	
2038	-	296,400	9,000	90,000	37,728	22,230	158,958	300,000	
2039	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2040	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2041	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2042	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2043	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
2044	-	-	9,000	90,000	37,728	22,230	158,958	300,000	
Resid. Value	(555,750)	(592,800.00)	-	-	-	-	-	-	
NPV at 0%	926,250	1,383,200					3,973,950	7,500,000	0.84
NPV at 5%	1,165,656	1,067,120					1,843,138	3,478,537	1.17
NPV at 10%	1,108,018	850,191					985,498	1,859,922	1.58

**Optiunea 2: formarea clusterului Panciu (aglomerarea Panciu, aglomerarea Straoane) cu epurarea apelor uzate la SEAU Panciu existenta.**

Year	Investment		Operating and maintenance costs					Financial	
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost	Total Water Quantity	unit cost
	Euro	Euro	Euro	Euro	Euro	Euro	Euro	m <sup>3</sup>	per m <sup>3</sup> EUR/m <sup>3</sup>
2015	-	-					-	-	
2016	110,334	47,286					-	-	
2017	331,002	141,858					-	-	
2018	331,002	141,858					-	-	
2019	331,002	141,858					-	-	
2020	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2021	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2022	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2023	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2024	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2025	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2026	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2027	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2028	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2029	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2030	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2031	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2032	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2033	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2034	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2035	-	47,286	3,000	52,500	12,576	12,610	80,686	300,000	
2036	-	141,858	3,000	52,500	12,576	12,610	80,686	300,000	
2037	-	141,858	3,000	52,500	12,576	12,610	80,686	300,000	
2038	-	141,858	3,000	52,500	12,576	12,610	80,686	300,000	
2039	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2040	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2041	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2042	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2043	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
2044	-	-	3,000	52,500	12,576	12,610	80,686	300,000	
Resid. Value	(413,752.50)	(283,716)	-	-	-	-	-	-	
NPV at 0%	689,588	662,004					2,017,140	7,500,000	0.45
NPV at 5%	867,824	510,727					935,559	3,478,537	0.67
NPV at 10%	824,913	406,904					500,230	1,859,922	0.93

## 5. Cluster Gugesti

**Optiunea 1:** Statii de epurare independente pentru aglomerarile Gugesti, Urechesti-Popesti, Dumbraveni, Sihlea, Obrejita-Slobozia Bradului- Tamboiesti

Year	Investment		Operating and maintenance costs					Financial	
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost	Total Water Quantity	unit per m3
	Euro	Euro	Euro	Euro	Euro	Euro	Euro	m3	EUR/m3
2015	-	-					-	-	
2016	627,000	418,000					-	-	
2017	1,881,000	1,254,000					-	-	
2018	1,881,000	1,254,000					-	-	
2019	1,881,000.00	1,254,000					-	-	
2020	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2021	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2022	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2023	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2024	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2025	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2026	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2027	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2028	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2029	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2030	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2031	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2032	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2033	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2034	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2035	-	418,000	39,000	225,000	62,880	94,050	420,930	1,300,000	
2036	-	1,254,000	39,000	225,000	62,880	94,050	420,930	1,300,000	
2037	-	1,254,000	39,000	225,000	62,880	94,050	420,930	1,300,000	
2038	-	1,254,000	39,000	225,000	62,880	94,050	420,930	1,300,000	
2039	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2040	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2041	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2042	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2043	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
2044	-	-	39,000	225,000	62,880	94,050	420,930	1,300,000	
Resid. Value	(2,351,250)	(2,508,000.00)	-	-	-	-	-	-	
NPV at 0%	3,918,750	5,852,000					10,523,250	32,500,000	0.62
NPV at 5%	4,931,621	4,514,736					4,880,735	15,073,660	0.95
NPV at 10%	4,687,770	3,596,961					2,609,657	8,059,663	1.35

**Optiunea 2:** formarea clusterului Gugesti (aglomerarea Gugesti, aglomerarea Urechesti-Popesti, aglomerarea Dumbraveni, aglomerarea Sihlea, aglomerare Obreja-Slobozia Bradului- Tamboiesti) cu epurarea apelor uzate la SEAU Gugesti extinsa;

Year	Investment		Operating and maintenance costs					Total O&M cost Euro	Total Water Quantity m3	Financial unit cost per m3 EUR/m3
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total			
	Euro	Euro	Euro	Euro	Euro	Euro	Euro			
2015	-	-					-	-		
2016	574,420	246,180					-	-		
2017	1,723,260	738,540					-	-		
2018	1,723,260	738,540					-	-		
2019	1,723,260	738,540					-	-		
2020	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2021	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2022	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2023	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2024	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2025	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2026	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2027	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2028	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2029	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2030	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2031	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2032	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2033	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2034	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2035	-	246,180	13,000	360,000	12,576	65,648	451,224	1,300,000		
2036	-	738,540	13,000	360,000	12,576	65,648	451,224	1,300,000		
2037	-	738,540	13,000	360,000	12,576	65,648	451,224	1,300,000		
2038	-	738,540	13,000	360,000	12,576	65,648	451,224	1,300,000		
2039	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2040	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2041	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2042	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2043	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
2044	-	-	13,000	360,000	12,576	65,648	451,224	1,300,000		
Resid. Value	(2,154,075.00)	(1,477,080)	-	-	-	-	-	-	-	
NPV at 0%	3,590,125	3,446,520					11,280,600	32,500,000	0.56	
NPV at 5%	4,518,057	2,658,942					5,231,998	15,073,660	0.82	
NPV at 10%	4,294,655	2,118,421					2,797,472	8,059,663	1.14	

## 6. Cluster Maicanesti

**Optiunea 1:** Statii de epurare independente pentru aglomerarile Biliesti, Suraia, Ciorasti, Maicanesti, Ramniceni, Tataranu si Vultur

Year	Investment		Operating and maintenance costs						Financial unit cost per m <sup>3</sup> EUR/m <sup>3</sup>
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Toal O&M cost	Total Water Quantity	
	Euro	Euro	Euro	Euro	Euro	Euro	Euro	m <sup>3</sup>	
2015	-	-					-	-	
2016	535,200	356,800					-	-	
2017	1,605,600	1,070,400					-	-	
2018	1,605,600	1,070,400					-	-	
2019	1,605,600.00	1,070,400					-	-	
2020	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2021	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2022	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2023	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2024	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2025	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2026	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2027	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2028	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2029	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2030	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2031	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2032	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2033	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2034	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2035	-	356,800	33,000	360,000	37,728	80,280	511,008	1,100,000	
2036	-	1,070,400	33,000	360,000	37,728	80,280	511,008	1,100,000	
2037	-	1,070,400	33,000	360,000	37,728	80,280	511,008	1,100,000	
2038	-	1,070,400	33,000	360,000	37,728	80,280	511,008	1,100,000	
2039	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2040	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2041	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2042	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2043	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
2044	-	-	33,000	360,000	37,728	80,280	511,008	1,100,000	
Resid. Value	(2,007,000)	(2,140,800.00)	-	-	-	-	-	-	
NPV at 0%	3,345,000	4,995,200					12,775,200	27,500,000	0.77
NPV at 5%	4,209,575	3,853,727					5,925,201	12,754,635	1.10
NPV at 10%	4,001,427	3,070,325					3,168,117	6,819,715	1.50

**Optiunea 2:** formarea clusterului Maicanesti (aglomerarea Biliesti, aglomerarea Suraia, aglomerarea Ciorasti, aglomerarea Maicanesti, aglomerare Ramniceni, aglomerarea Tataranu si aglomerarea Vulturu) cu epurarea apelor uzate la SEAU Maicanesti noua.

Year	Investment		Operating and maintenance costs					Total Water Quantity m3	Financial unit cost per m3 EUR/m3
	Main works	Plant and Machinery	Materials costs	Electricity costs	Personnel costs	Maintenance costs	Total O&M cost		
	Euro	Euro	Euro	Euro	Euro	Euro	Euro		
2015	-	-					-	-	
2016	695,100	297,900					-	-	
2017	2,085,300	893,700					-	-	
2018	2,085,300	893,700					-	-	
2019	2,085,300	893,700					-	-	
2020	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2021	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2022	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2023	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2024	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2025	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2026	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2027	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2028	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2029	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2030	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2031	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2032	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2033	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2034	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2035	-	297,900	11,000	270,000	12,576	79,440	373,016	1,100,000	
2036	-	893,700	11,000	270,000	12,576	79,440	373,016	1,100,000	
2037	-	893,700	11,000	270,000	12,576	79,440	373,016	1,100,000	
2038	-	893,700	11,000	270,000	12,576	79,440	373,016	1,100,000	
2039	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2040	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2041	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2042	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2043	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
2044	-	-	11,000	270,000	12,576	79,440	373,016	1,100,000	
Resid. Value	(2,606,625.00)	(1,787,400)	-	-	-	-	-	-	
NPV at 0%	4,344,375	4,170,600					9,325,400	27,500,000	0.65
NPV at 5%	5,467,256	3,217,560					4,325,166	12,754,635	1.02
NPV at 10%	5,196,920	2,563,480					2,312,602	6,819,715	1.48