

## **ANNEX 5.4:**

### **VRBAS FINANCIAL MODEL – OPTIMISTIC CASE**



Demand projection		1	2	3	4	5	6	7	8	9	10	20	32
Financial year ending	Units	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Water:</b>													
<b>Vrbas town</b>													
Unit domestic consumption - before elasticity	m3/p/d	0.136	0.137	0.138	0.139	0.140	0.141	0.141	0.142	0.142	0.143	0.146	0.150
Price elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Unit domestic consumption - after elasticity	m3/p/d	0.136	0.137	0.138	0.139	0.140	0.141	0.141	0.142	0.142	0.143	0.146	0.150
<b>Vrbas villages</b>													
Unit domestic consumption - before elasticity	m3/p/d	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135
Price elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Unit domestic consumption - after elasticity	m3/p/d	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135	0.135
<b>Kula town</b>													
Unit domestic consumption - before elasticity	m3/p/d	0.136	0.137	0.138	0.139	0.140	0.141	0.141	0.142	0.142	0.143	0.146	0.150
Price elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Unit domestic consumption - after elasticity	m3/p/d	0.136	0.137	0.138	0.139	0.140	0.141	0.141	0.142	0.142	0.143	0.146	0.150
<b>Wastewater:</b>													
<b>Vrbas town</b>													
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Unit domestic consumption - before elasticity	m3/p/d	0.122	0.123	0.124	0.125	0.126	0.126	0.127	0.127	0.128	0.128	0.132	0.135
Price elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Unit domestic consumption - after elasticity	m3/p/d	0.122	0.123	0.124	0.125	0.126	0.126	0.127	0.127	0.128	0.128	0.132	0.135
<b>Vrbas villages</b>													
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Unit domestic consumption - before elasticity	m3/p/d	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122
Price elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Unit domestic consumption - after elasticity	m3/p/d	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122
<b>Kula town</b>													
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Unit domestic consumption - before elasticity	m3/p/d	0.122	0.123	0.124	0.125	0.126	0.126	0.127	0.127	0.128	0.128	0.132	0.135
Price elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/p/d	-	-	-	-	-	-	-	-	-	-	-	-
Unit domestic consumption - after elasticity	m3/p/d	0.122	0.123	0.124	0.125	0.126	0.126	0.127	0.127	0.128	0.128	0.132	0.135

Demand projection													
Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Water demand:													
Domestic PE connected to the Water system													
Vrbas town	Inh	26,535	26,641	26,748	26,855	26,962	27,070	27,178	27,287	27,396	27,506	28,626	30,031
Vrbas villages	Inh	19,901	19,921	19,941	19,961	19,981	20,001	20,021	20,041	20,061	20,081	20,283	20,527
Kula town	Inh	19,592	19,641	19,690	19,740	19,789	19,838	19,888	19,938	19,988	20,038	20,544	21,169
Water sale Vrbas town													
Domestic:	m3/y	1,317,198	1,332,191	1,347,283	1,362,474	1,377,765	1,388,216	1,398,729	1,409,304	1,419,941	1,430,641	1,530,394	1,644,177
- water billed	m3/y	1,317,198	1,332,191	1,347,283	1,362,474	1,377,765	1,388,216	1,398,729	1,409,304	1,419,941	1,430,641	1,530,394	1,644,177
- unaccounted for water (administrative)	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
UFW	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Industry:													
before elasticity	m3/y	120,584	125,909	131,274	136,681	142,129	147,618	155,619	163,681	171,806	179,993	240,276	271,332
increase water consumption (new connections, new businesses)	m3/y	5,325	5,366	5,407	5,448	5,489	8,001	8,063	8,125	8,187	8,250	2,498	2,697
Price elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Water consumption by industry - after elasticity	m3/y	125,909	131,274	136,681	142,129	147,618	155,619	163,681	171,806	179,993	188,242	242,773	274,030
Institutional users													
before elasticity	m3/y	120,584	125,909	131,274	136,681	142,129	147,618	155,619	163,681	171,806	179,993	240,276	271,332
increase water consumption (new connections)	m3/y	5,325	5,366	5,407	5,448	5,489	8,001	8,063	8,125	8,187	8,250	2,498	2,697
Price elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Water consumption by institutional	m3/y	125,909	131,274	136,681	142,129	147,618	155,619	163,681	171,806	179,993	188,242	242,773	274,030
Water sale Vrbas villages													
Domestic:	m3/y	980,621	981,602	982,583	983,566	984,550	985,534	986,520	987,506	988,494	989,482	999,422	1,011,481
- water billed	m3/y	980,621	981,602	982,583	983,566	984,550	985,534	986,520	987,506	988,494	989,482	999,422	1,011,481
- unaccounted for water (administrative)	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
UFW	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Industry:													
before elasticity	m3/y	54,425	59,927	65,440	70,964	76,500	82,046	84,865	87,691	90,521	93,358	123,987	165,110
increase water consumption (new connections, new businesses)	m3/y	5,502	5,513	5,524	5,535	5,546	2,820	2,825	2,831	2,836	2,842	3,390	3,471
Price elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Water consumption by industry - after elasticity	m3/y	59,927	65,440	70,964	76,500	82,046	84,865	87,691	90,521	93,358	96,200	127,377	168,580
Institutional users													
before elasticity	m3/y	18,142	19,976	21,813	23,655	25,500	27,349	28,288	29,230	30,174	31,119	41,329	55,037
increase water consumption (new connections)	m3/y	1,834	1,838	1,841	1,845	1,849	940	942	944	945	947	1,130	1,157
Price elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Water consumption by institutional	m3/y	19,976	21,813	23,655	25,500	27,349	28,288	29,230	30,174	31,119	32,067	42,459	56,193

Demand projection		1	2	3	4	5	6	7	8	9	10	20	32
Financial year ending	Units	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Water sale total - Vrbas town &amp; villages:</b>	m3/y	2,629,539	2,663,595	2,697,847	2,732,297	2,766,944	2,798,142	2,829,532	2,861,117	2,892,897	2,924,873	3,185,199	3,428,491
domestic	m3/y	2,297,820	2,313,793	2,329,866	2,346,040	2,362,315	2,373,751	2,385,249	2,396,810	2,408,435	2,420,123	2,529,816	2,655,658
industry	m3/y	185,836	196,714	207,645	218,628	229,663	240,484	251,372	262,327	273,350	284,442	370,151	442,610
institutional users	m3/y	145,884	153,088	160,336	167,628	174,966	183,907	192,911	201,979	211,112	220,309	285,232	330,223
Losses													
Water losses out of water sold	%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%
Water losses out of water produced	%	28%	28%	28%	28%	28%	28%	28%	28%	28%	28%	28%	28%
Water losses (assumption)	m3/y	1,007,964	1,021,018	1,034,148	1,047,353	1,060,634	1,072,593	1,084,626	1,096,733	1,108,915	1,121,172	1,220,961	1,314,220
Water production - TOTAL	m3/y	3,637,503	3,684,613	3,731,995	3,779,650	3,827,579	3,870,734	3,914,158	3,957,849	4,001,812	4,046,046	4,406,160	4,742,711
<b>Water sale Kula town</b>													
Domestic:	m3/y	972,563	982,164	991,806	1,001,491	1,011,217	1,017,366	1,023,539	1,029,736	1,035,958	1,042,205	1,098,329	1,159,007
- water billed	m3/y	972,563	982,164	991,806	1,001,491	1,011,217	1,017,366	1,023,539	1,029,736	1,035,958	1,042,205	1,098,329	1,159,007
- unaccounted for water (administrative)	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
UFW	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Industry:													
before elasticity	m3/y	89,167	92,966	96,783	100,618	104,472	108,345	114,046	119,776	125,533	131,319	172,699	191,553
increase water consumption (new connections, new businesses)	m3/y	3,799	3,817	3,835	3,854	3,873	5,702	5,729	5,757	5,785	5,814	1,534	1,615
Price elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Water consumption by industry - after elasticity	m3/y	92,966	96,783	100,618	104,472	108,345	114,046	119,776	125,533	131,319	137,132	174,233	193,168
Institutional users													
before elasticity	m3/y	89,167	92,966	96,783	100,618	104,472	108,345	114,046	119,776	125,533	131,319	172,699	191,553
increase water consumption (new connections)	m3/y	3,799	3,817	3,835	3,854	3,873	5,702	5,729	5,757	5,785	5,814	1,534	1,615
Price elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Income elasticity effect	m3/y	-	-	-	-	-	-	-	-	-	-	-	-
Water consumption by institutional	m3/y	92,966	96,783	100,618	104,472	108,345	114,046	119,776	125,533	131,319	137,132	174,233	193,168
<b>Water sale total - Kula town</b>	m3/y	1,158,495	1,175,729	1,193,042	1,210,435	1,227,907	1,245,459	1,263,091	1,280,803	1,298,596	1,316,470	1,446,795	1,545,343
domestic	m3/y	972,563	982,164	991,806	1,001,491	1,011,217	1,017,366	1,023,539	1,029,736	1,035,958	1,042,205	1,098,329	1,159,007
industry	m3/y	92,966	96,783	100,618	104,472	108,345	114,046	119,776	125,533	131,319	137,132	174,233	193,168
institutional users	m3/y	92,966	96,783	100,618	104,472	108,345	114,046	119,776	125,533	131,319	137,132	174,233	193,168
Losses													
Water losses out of water sold	%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%
Water losses out of water produced	%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
Water losses (assumption)	m3/y	772,330	783,819	795,361	806,957	818,605	830,306	842,060	853,869	865,731	877,647	964,530	1,030,228
Water production - TOTAL	m3/y	1,930,824	1,959,548	1,988,404	2,017,391	2,046,511	2,075,764	2,105,151	2,134,671	2,164,326	2,194,116	2,411,326	2,575,571

Demand projection													
Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Wastewater demand													
existing + new users Vrbas town	Inh	22,555	26,641	26,748	26,855	26,962	27,070	27,178	27,287	27,396	27,506	28,626	30,031
new users 5 villages Vrbas	Inh	5,970	11,953	19,941	19,961	19,981	20,001	20,021	20,041	20,061	20,081	20,283	20,527
new users Kula town	Inh	-	-	-	-	14,842	15,375	15,910	16,449	16,989	17,533	20,544	21,169
Total domestic users connected	Inh	28,525	38,594	46,689	46,815	61,785	62,445	63,109	63,776	64,446	65,119	69,453	71,727
Wastewater sale Vrbas town													
Domestic consumption - after elasticity	m3/y	1,007,657	1,198,972	1,212,555	1,226,227	1,239,989	1,249,395	1,258,856	1,268,374	1,277,947	1,287,577	1,377,355	1,479,759
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Small industries - after elasticity	m3/y	96,320	118,147	123,013	127,916	132,856	140,057	147,313	154,625	161,993	169,418	218,496	246,627
Large industries:													
Carnex	m3/y	-	-	-	1,241,000	1,241,000	1,241,000	1,241,000	1,241,000	1,241,000	1,241,000	1,241,000	1,241,000
Vital	m3/y	-	-	-	456,250	456,250	456,250	456,250	456,250	456,250	456,250	456,250	456,250
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Institutional users - after elasticity	m3/y	96,320	118,147	123,013	127,916	132,856	140,057	147,313	154,625	161,993	169,418	218,496	246,627
Wastewater sale Vrbas villages													
Domestic consumption - after elasticity	m3/y	264,768	530,065	884,325	885,209	886,095	886,981	887,868	888,756	889,644	890,534	899,480	910,333
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Small industries - after elasticity	m3/y	16,180	35,338	63,868	68,850	73,841	76,379	78,922	81,469	84,022	86,580	114,640	151,722
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Institutional users - after elasticity	m3/y	5,393	11,779	21,289	22,950	24,614	25,460	26,307	27,156	28,007	28,860	38,213	50,574
Wastewater sale Kula town													
Domestic consumption - after elasticity	m3/y	-	-	-	-	682,572	709,613	736,948	764,579	792,508	820,737	988,497	1,043,106
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Small industries - after elasticity	m3/y	-	-	-	-	73,133	79,547	86,239	93,208	100,459	107,992	156,810	173,851
Large industries:													
Istra	m3/y	-	-	-	-	401,500	401,500	401,500	401,500	401,500	401,500	401,500	401,500
Eterna	m3/y	-	-	-	-	547,500	547,500	547,500	547,500	547,500	547,500	547,500	547,500
Factor water to waste water	%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Institutional users - after elasticity	m3/y	-	-	-	-	73,133	79,547	86,239	93,208	100,459	107,992	156,810	173,851
Wastewater Vrbas city + villages													
by type of customer													
domestic	m3/y	1,272,424	1,729,037	2,096,880	2,111,436	2,126,083	2,136,375	2,146,724	2,157,129	2,167,591	2,178,111	2,276,834	2,390,092
Industry -small	m3/y	112,500	153,485	186,881	196,765	206,697	216,436	226,235	236,094	246,015	255,998	333,136	398,349
industry - big	m3/y	-	-	-	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250
institutional users	m3/y	101,714	129,926	144,302	150,866	157,470	165,516	173,620	181,781	190,001	198,278	256,709	297,201
by location													
Vrbas town	m3/y	1,200,297	1,435,266	1,458,580	3,179,308	3,202,950	3,226,758	3,250,732	3,274,874	3,299,183	3,323,662	3,511,597	3,670,263
Vrbas villages	m3/y	286,341	577,182	969,482	977,009	984,550	988,819	993,096	997,381	1,001,674	1,005,974	1,052,332	1,112,629
Infiltration													
Vrbas town	m3/y	851,472	914,544	977,616	1,040,688	1,103,760	1,103,760	1,103,760	1,103,760	1,103,760	1,103,760	1,103,760	1,103,760
Vrbas villages	m3/y	75,686	151,373	227,059	302,746	378,432	387,893	397,354	406,814	416,275	425,736	491,591	536,112
Wastewater delivered to the WWTP	m3/y	2,413,797	3,078,364	3,632,738	5,499,751	5,669,692	5,707,230	5,744,942	5,782,829	5,820,892	5,859,132	6,159,279	6,422,764
Wastewater delivered to the WWTP	m3/d	6,613	8,434	9,953	15,068	15,533	15,636	15,740	15,843	15,948	16,052	16,875	17,597

Demand projection													
Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Wastewater total	m3/y	1,486,638	2,012,448	2,428,062	4,156,317	5,965,337	6,033,285	6,102,254	6,172,251	6,243,283	6,315,356	6,815,045	7,122,700
by type of customer													
domestic	m3/y	1,272,424	1,729,037	2,096,880	2,111,436	2,808,655	2,845,988	2,883,672	2,921,709	2,960,100	2,998,847	3,265,331	3,433,199
Industry -small	m3/y	112,500	153,485	186,881	196,765	279,830	295,983	312,473	329,303	346,474	363,989	489,945	572,200
industry - big	m3/y	-	-	-	1,697,250	2,646,250	2,646,250	2,646,250	2,646,250	2,646,250	2,646,250	2,646,250	2,646,250
institutional users	m3/y	101,714	129,926	144,302	150,866	230,602	245,064	259,859	274,990	290,459	306,270	413,519	471,052
by location													
Vrbas town	m3/y	1,200,297	1,435,266	1,458,580	3,179,308	3,202,950	3,226,758	3,250,732	3,274,874	3,299,183	3,323,662	3,511,597	3,670,263
Vrbas villages	m3/y	286,341	577,182	969,482	977,009	984,550	988,819	993,096	997,381	1,001,674	1,005,974	1,052,332	1,112,629
Kula town	m3/y	-	-	-	-	1,777,837	1,817,707	1,858,425	1,899,996	1,942,426	1,985,720	2,251,116	2,339,808
Infiltration													
Infiltration	%	62%	53%	50%	32%	33%	33%	33%	33%	33%	33%	33%	34%
Infiltration - Vrbas town	m3/y	851,472	914,544	977,616	1,040,688	1,103,760	1,103,760	1,103,760	1,103,760	1,103,760	1,103,760	1,103,760	1,103,760
Infiltration - Vrbas villages	m3/y	75,686	151,373	227,059	302,746	378,432	387,893	397,354	406,814	416,275	425,736	491,591	536,112
Infiltration - Kula town	m3/y					473,040	488,808	504,576	520,344	536,112	551,880	677,096	788,400
Wastewater delivered to the WWTP	m3/y	2,413,797	3,078,364	3,632,738	5,499,751	7,920,569	8,013,746	8,107,944	8,203,170	8,299,430	8,396,732	9,087,492	9,550,972
Wastewater delivered to the WWTP	m3/d	6,613	8,434	9,953	15,068	21,700	21,955	22,214	22,474	22,738	23,005	24,897	26,167

**Capital expenditure**

Financial year ending	Units	Total	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	17 2024	18 2025	32 2039
<b>Summary (incl. VAT &amp; contingencies)</b>														
Investment	€ m	25.16	2.46	11.35	11.35									
Land	€ m	0.02	-	0.02	-									
<b>Total. Incl. VAT &amp; contingencies</b>	<b>€ m</b>	<b>25.18</b>	<b>2.46</b>	<b>11.37</b>	<b>11.35</b>									
<b>WWTP (excl. contingencies, excl. VAT)</b>														
Investigation works & design	€ m	0.49	-	0.25	0.25									
Construction works	€ m	4.38	-	2.19	2.19									
Electro-mechanical equipment	€ m	5.31	-	2.66	2.66									
Additional land acquisition (1,5 ha)	€ m	0.02	-	0.02	-									
Trial run, staff training, operation	€ m	0.30	-	0.15	0.15									
<b>Sewerage</b>														
Vrbas main sewers	€ m	0.45	-	0.23	0.23									
Vrbas villages sewerage extension - civil works	€ m	1.33	0.27	0.53	0.53									
Vrbas villages sewerage extension - elctr/mech	€ m	0.38	0.08	0.15	0.15									
Vrbas villages sewerage extension - pipes & fitti	€ m	9.49	1.90	3.80	3.80									
<b>Supervision</b>														
Supervision WWTP	€ m	0.57	-	0.28	0.28									
Supervision sewer extension	€ m	0.35	0.07	0.14	0.14									
<b>Total</b>	<b>€ m</b>	<b>23.06</b>	<b>2.31</b>	<b>10.39</b>	<b>10.37</b>									
<b>WWTP (incl. contingencies, excl. VAT)</b>														
Investigation works & design	€ m	0.49	-	0.25	0.25									
Construction works	€ m	5.04	-	2.52	2.52									
Electro-mechanical equipment	€ m	5.79	-	2.89	2.89									
Additional land acquisition (1,5 ha)	€ m	0.02	-	0.02	-									
Trial run, staff training, operation	€ m	0.30	-	0.15	0.15									
<b>Sewerage</b>														
Vrbas main sewers	€ m	0.45	-	0.23	0.23									
Vrbas villages sewerage extension - civil works	€ m	1.33	0.27	0.53	0.53									
Vrbas villages sewerage extension - elctr/mech	€ m	0.38	0.08	0.15	0.15									
Vrbas villages sewerage extension - pipes & fitti	€ m	9.49	1.90	3.80	3.80									
<b>Supervision</b>														
Supervision WWTP	€ m	0.90	-	0.45	0.45									
Supervision sewer extension	€ m	0.58	0.12	0.23	0.23									
<b>Total</b>	<b>€ m</b>	<b>24.77</b>	<b>2.36</b>	<b>11.22</b>	<b>11.20</b>									

**Capital expenditure**

Financial year ending	Units	Total	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	17 2024	18 2025	32 2039
<b>WWTP (incl. contingencies, incl. VAT)</b>														
Investigation works & design	€ m	0.50	-	0.25	0.25									
Construction works	€ m	5.11	-	2.55	2.55									
Electro-mechanical equipment	€ m	5.87	-	2.93	2.93									
Additional land acquisition (1,5 ha)	€ m	0.02	-	0.02	-									
Trial run, staff training, operation	€ m	0.30	-	0.15	0.15									
<b>Sewerage</b>														
Vrbas main sewers	€ m	0.46	-	0.23	0.23									
Vrbas villages sewerage extension - civil works	€ m	1.35	0.28	0.54	0.54									
Vrbas villages sewerage extension - elctr/mech	€ m	0.39	0.08	0.15	0.15									
Vrbas villages sewerage extension - pipes & fitti	€ m	9.69	1.98	3.85	3.85									
<b>Supervision</b>														
Supervision WWTP	€ m	0.92	-	0.46	0.46									
Supervision sewer extension	€ m	0.59	0.12	0.24	0.24									
<b>Total</b>	<b>€ m</b>	<b>25.18</b>	<b>2.46</b>	<b>11.37</b>	<b>11.35</b>									
<b>Reinvestment</b>														
WWTP - electro-mechanical equipment	€ m	8.26												
Sewerage pumps Vrbas villages	€ m	0.53										0.53	8.26	
<b>Financing</b>														
EU-IPA	€ m	18.56	-	9.28	9.28									
Min. Agriculture, DG Water	€ m	3.87	-	1.94	1.94									
Municipal contribution	€ m	2.75	2.46	0.16	0.14									
Loan	€ m	-	-	-	-									
<b>Total</b>	<b>€ m</b>	<b>25.18</b>	<b>2.46</b>	<b>11.37</b>	<b>11.35</b>									



Operational expenditures		1	2	3	4	5	6	7	8	9	10	20	32
Financial year ending	Units	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Expenditure by component</b>													
Drinking water	000 RSD	64,654	68,770	73,430	81,773	88,353	95,774	103,942	112,755	121,049	129,997	269,780	674,650
Sewage collection Vrbas city	000 RSD	18,807	20,302	21,724	28,345	30,871	33,824	36,982	40,346	43,401	46,736	99,360	253,194
Waste water treatment	000 RSD	-	-	-	99,695	104,058	108,263	112,795	117,681	122,482	127,632	221,113	438,213
Sewage collection 5 Vrbas villages	000 RSD	-	7,734	23,525	42,035	44,230	46,174	48,297	50,617	52,949	55,489	97,960	230,183
<b>Total</b>		<b>83,461</b>	<b>96,805</b>	<b>118,680</b>	<b>251,848</b>	<b>267,512</b>	<b>284,035</b>	<b>302,017</b>	<b>321,400</b>	<b>339,881</b>	<b>359,854</b>	<b>688,213</b>	<b>1,596,239</b>
Drinking water	%	77%	71%	62%	32%	33%	34%	34%	35%	36%	36%	39%	42%
Sewage collection Vrbas city	%	23%	21%	18%	11%	12%	12%	12%	13%	13%	13%	14%	16%
Waste water treatment	%	0%	0%	0%	40%	39%	38%	37%	37%	36%	35%	32%	27%
Sewage collection 5 Vrbas villages	%	0%	8%	20%	17%	17%	16%	16%	16%	16%	15%	14%	14%
<b>Total</b>	<b>%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Expenditure by service</b>													
water	000 RSD	64,654	68,770	73,430	81,773	88,353	95,774	103,942	112,755	121,049	129,997	269,780	674,650
sewage collection	000 RSD	18,807	28,036	45,250	70,380	75,102	79,998	85,279	90,963	96,350	102,225	197,320	483,376
wastewater	000 RSD	-	-	-	99,695	104,058	108,263	112,795	117,681	122,482	127,632	221,113	438,213
<b>Total costs</b>	<b>000 RSD</b>	<b>83,461</b>	<b>96,805</b>	<b>118,680</b>	<b>251,848</b>	<b>267,512</b>	<b>284,035</b>	<b>302,017</b>	<b>321,400</b>	<b>339,881</b>	<b>359,854</b>	<b>688,213</b>	<b>1,596,239</b>
going to water	%	77%	71%	62%	32%	33%	34%	34%	35%	36%	36%	39%	42%
going to sewage collection	%	23%	29%	38%	28%	28%	28%	28%	28%	28%	28%	29%	30%
going to wastewater	%	0%	0%	0%	40%	39%	38%	37%	37%	36%	35%	32%	27%
<b>Total</b>	<b>%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Depreciation</b>													
water services	000 RSD	3,500	3,534	3,592	3,855	3,963	4,358	4,870	5,336	5,840	6,380	15,130	37,706
sewage collection	000 RSD	2,714	6,830	14,790	24,287	24,501	24,924	25,312	25,644	25,884	26,170	31,255	39,998
wastewater services	000 RSD	-	-	-	42,097	42,097	42,097	42,097	42,097	42,097	42,097	57,936	57,936
<b>Depreciation</b>	<b>000 RSD</b>	<b>6,214</b>	<b>10,363</b>	<b>18,382</b>	<b>70,240</b>	<b>70,561</b>	<b>71,379</b>	<b>72,279</b>	<b>73,077</b>	<b>73,821</b>	<b>74,648</b>	<b>104,320</b>	<b>135,640</b>
going to water	%	56%	34%	20%	5%	6%	6%	7%	7%	8%	9%	15%	28%
going to sewage collection	%	44%	66%	80%	35%	35%	35%	35%	35%	35%	35%	30%	29%
going to wastewater	%	0%	0%	0%	60%	60%	59%	58%	58%	57%	56%	56%	43%
<b>Total</b>	<b>%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Operational expenditures													
Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Cost structure for existing water services													
Water													
Water demand	m3/y	3,637,503	3,684,613	3,731,995	3,779,650	3,827,579	3,870,734	3,914,158	3,957,849	4,001,812	4,046,046	4,406,160	4,742,711
Variable costs		12,535	13,786	15,170	16,701	18,397	20,249	22,299	24,568	27,081	29,866	79,445	260,551
Liquid chlorine	000 RSD	790	832	877	924	973	1,023	1,076	1,131	1,190	1,251	2,017	3,475
Electricity	000 RSD	9,180	10,251	11,446	12,779	14,266	15,904	17,730	19,763	22,029	24,553	70,881	245,793
Fuel and lubricant	000 RSD	2,565	2,703	2,847	2,999	3,158	3,321	3,493	3,673	3,863	4,062	6,547	11,283
Fixed costs	000 RSD	52,118	54,984	58,261	65,072	69,956	75,525	81,644	88,187	93,967	100,131	190,335	414,100
Wages and Salaries	000 RSD	19,666	21,066	22,785	25,611	27,967	30,540	33,350	36,418	39,011	41,789	83,132	189,764
Employee benefits	000 RSD	3,610	3,867	4,183	4,701	5,134	5,606	6,122	6,685	7,161	7,671	15,260	34,833
Other materials	000 RSD	3,480	3,619	3,764	3,914	4,071	4,234	4,403	4,579	4,762	4,953	7,331	11,738
Transport services	000 RSD	16	17	18	19	20	21	23	24	26	27	46	89
Repair services	000 RSD	10,562	11,067	11,624	12,210	12,857	13,539	14,256	15,012	15,730	16,482	26,289	46,039
Other services	000 RSD	2,826	2,961	3,110	3,267	3,440	3,622	3,814	4,017	4,209	4,410	7,034	12,318
Taxes and fees	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation	000 RSD	3,500	3,534	3,592	3,855	3,963	4,358	4,870	5,336	5,840	6,380	15,130	37,706
Other costs	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-
Overhead costs	000 RSD	8,459	8,853	9,184	11,494	12,503	13,604	14,805	16,115	17,228	18,420	36,112	81,613
TOTAL	000 RSD	64,654	68,770	73,430	81,773	88,353	95,774	103,942	112,755	121,049	129,997	269,780	674,650

Operational expenditures														
Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039	
Cost structure for existing wastewater services														
Wastewater demand (Vrbas town)	m3/y	1,200,297	1,435,266	1,458,580	3,179,308	3,202,950	3,226,758	3,250,732	3,274,874	3,299,183	3,323,662	3,511,597	3,670,263	
Variable costs	000 RSD	1,621	2,137	2,394	5,752	6,388	7,095	7,879	8,750	9,718	10,793	30,228	101,782	
Electricity	000 RSD	1,621	2,137	2,394	5,752	6,388	7,095	7,879	8,750	9,718	10,793	30,228	101,782	
Fixed costs	000 RSD	17,186	18,165	19,330	22,593	24,483	26,730	29,103	31,596	33,683	35,944	69,132	151,411	
Wages and Salaries	000 RSD	7,365	7,889	8,533	10,195	11,133	12,158	13,276	14,497	15,530	16,635	33,093	75,542	
Employee benefits	000 RSD	1,440	1,543	1,668	1,994	2,177	2,377	2,596	2,835	3,037	3,253	6,471	14,771	
Other materials	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Transport services	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Repair services	000 RSD	2,500	2,620	2,752	2,890	3,043	3,205	3,375	3,553	3,723	3,901	6,223	10,897	
Other services	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Taxes and fees	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Depreciation	000 RSD	2,714	2,799	2,939	2,939	3,152	3,575	3,963	4,295	4,535	4,822	8,969	17,713	
Other costs	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Overhead	000 RSD	3,168	3,315	3,439	4,575	4,977	5,416	5,894	6,415	6,858	7,333	14,376	32,489	
TOTAL costs for existing infrastructure	000 RSD	18,807	20,302	21,724	28,345	30,871	33,824	36,982	40,346	43,401	46,736	99,360	253,194	
Incremental operational costs caused by connection of large industries to existing sewage collection network in Vrbas city:														
Wastewater demand large industries	m3/y	-	-	-	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	1,697,250	
Variable costs	000 RSD	-	-	-	3,071	3,385	3,732	4,114	4,535	4,999	5,511	14,610	47,068	
Electricity	000 RSD	-	-	-	3,071	3,385	3,732	4,114	4,535	4,999	5,511	14,610	47,068	
Existing/base line costs sewage collection Vrbas city														
Variable costs	000 RSD	1,621	2,137	2,394	2,681	3,003	3,363	3,765	4,215	4,719	5,281	15,618	54,715	
Electricity	000 RSD	1,621	2,137	2,394	2,681	3,003	3,363	3,765	4,215	4,719	5,281	15,618	54,715	
Fixed costs	000 RSD	17,186	18,165	19,330	22,593	24,483	26,730	29,103	31,596	33,683	35,944	69,132	151,411	
Wages and Salaries	000 RSD	7,365	7,889	8,533	10,195	11,133	12,158	13,276	14,497	15,530	16,635	33,093	75,542	
Employee benefits	000 RSD	1,440	1,543	1,668	1,994	2,177	2,377	2,596	2,835	3,037	3,253	6,471	14,771	
Other materials	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Transport services	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Repair services	000 RSD	2,500	2,620	2,752	2,890	3,043	3,205	3,375	3,553	3,723	3,901	6,223	10,897	
Other services	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Taxes and fees	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Depreciation	000 RSD	2,714	2,799	2,939	2,939	3,152	3,575	3,963	4,295	4,535	4,822	8,969	17,713	
Other costs	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-	
Overhead	000 RSD	3,168	3,315	3,439	4,575	4,977	5,416	5,894	6,415	6,858	7,333	14,376	32,489	
TOTAL costs	000 RSD	18,807	20,302	21,724	25,274	27,486	30,093	32,868	35,811	38,402	41,225	84,750	206,126	

Operational expenditures													
Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Incremental costs for WWTP													
Waste water delivered at WWTP (Vrbas municipality only, including infiltration)					5,499,751	5,669,692	5,707,230	5,744,942	5,782,829	5,820,892	5,859,132	6,159,279	6,422,764
Variable costs		-	-	-	29,473	31,943	34,118	36,471	39,018	41,727	44,661	91,313	236,467
Use of chemicals	000 RSD				3,335	3,575	3,743	3,919	4,102	4,294	4,495	6,995	11,679
Electricity	000 RSD				9,125	10,371	11,508	12,771	14,171	15,725	17,449	48,625	163,352
Sludge transport	000 RSD				3,534	3,883	4,167	4,472	4,798	5,098	5,417	9,783	19,527
Effluent discharge fee	000 RSD				13,479	14,113	14,699	15,310	15,947	16,609	17,300	25,910	41,908
Fixed costs	000 RSD	-	-	-	70,222	72,115	74,145	76,324	78,663	80,755	82,971	129,799	201,746
Wages and Salaries	000 RSD				6,443	7,036	7,684	8,390	9,162	9,815	10,514	20,915	47,742
Employee benefits	000 RSD				1,289	1,407	1,537	1,678	1,832	1,963	2,103	4,183	9,548
Other materials	000 RSD												
Transport services	000 RSD												
Repair services	000 RSD				13,777	14,508	15,277	16,086	16,939	17,748	18,597	29,663	51,947
Other services	000 RSD				3,724	3,921	4,129	4,348	4,578	4,797	5,026	8,017	14,040
Taxes and fees	000 RSD												
Depreciation	000 RSD				42,097	42,097	42,097	42,097	42,097	42,097	42,097	57,936	57,936
Overhead	000 RSD	-	-	-	2,892	3,146	3,423	3,725	4,054	4,334	4,634	9,085	20,533
TOTAL incremental costs	000 RSD	-	-	-	99,695	104,058	108,263	112,795	117,681	122,482	127,632	221,113	438,213
Variable costs	%				30%	31%	32%	32%	33%	34%	35%	41%	54%
Use of chemicals	%				3%	3%	3%	3%	3%	4%	4%	3%	3%
Electricity	%				9%	10%	11%	11%	12%	13%	14%	22%	37%
Sludge transport	%				4%	4%	4%	4%	4%	4%	4%	4%	4%
Effluent discharge fee	%				14%	14%	14%	14%	14%	14%	14%	12%	10%
Fixed costs	%				70%	69%	68%	68%	67%	66%	65%	59%	46%
Wages and Salaries	%				6%	7%	7%	7%	8%	8%	8%	9%	11%
Employee benefits	%				1%	1%	1%	1%	2%	2%	2%	2%	2%
Other materials	%				0%	0%	0%	0%	0%	0%	0%	0%	0%
Transport services	%				0%	0%	0%	0%	0%	0%	0%	0%	0%
Repair services	%				14%	14%	14%	14%	14%	14%	15%	13%	12%
Other services	%				4%	4%	4%	4%	4%	4%	4%	4%	3%
Taxes and fees	%				0%	0%	0%	0%	0%	0%	0%	0%	0%
Depreciation	%				42%	40%	39%	37%	36%	34%	33%	26%	13%
Overhead	%				3%	3%	3%	3%	3%	4%	4%	4%	5%
TOTAL incremental costs	%				100%	100%	100%	100%	100%	100%	100%	100%	100%
Incremental costs for sewerage extension													
Waste water originating from villages		340,454	681,438	1,111,384	1,187,955	1,264,527	1,274,874	1,285,221	1,295,570	1,305,920	1,316,270	1,391,070	1,446,445
Variable costs		-	1,227	4,057	7,454	8,747	9,722	10,804	12,007	13,342	14,825	41,532	139,125
Use of chemicals	000 RSD												
Electricity	000 RSD		1,227	4,057	7,454	8,747	9,722	10,804	12,007	13,342	14,825	41,532	139,125
Fixed costs	000 RSD	-	6,507	19,468	34,581	35,483	36,452	37,492	38,611	39,607	40,664	56,428	91,058
Wages and Salaries	000 RSD	-	551	1,787	3,222	3,518	3,842	4,195	4,581	4,907	5,257	10,457	23,871
Employee benefits	000 RSD	-	110	357	644	704	768	839	916	981	1,051	2,091	4,774
Other materials	000 RSD												
Transport services	000 RSD												
Repair services	000 RSD		1,394	4,183	6,972	7,341	7,730	8,140	8,572	8,981	9,411	15,011	26,287
Other services	000 RSD		190	569	948	998	1,051	1,107	1,166	1,221	1,280	2,041	3,575
Taxes and fees	000 RSD												
Depreciation	000 RSD	-	4,030	11,851	21,349	21,349	21,349	21,349	21,349	21,349	21,349	22,285	22,285
Overhead	000 RSD	-	231	720	1,446	1,573	1,711	1,862	2,027	2,167	2,317	4,543	10,266
TOTAL incremental costs	000 RSD	-	7,734	23,525	42,035	44,230	46,174	48,297	50,617	52,949	55,489	97,960	230,183

Operational expenditures		1	2	3	4	5	6	7	8	9	10	20	32
Financial year ending	Units	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Total wastewater costs</b>													
costs of the current system	000 RSD	15,639	16,987	18,285	23,770	25,894	28,409	31,088	33,931	36,543	39,404	84,984	220,705
incremental costs WWTP	000 RSD	-	-	-	96,803	100,912	104,841	109,071	113,627	118,147	122,998	212,028	417,680
incremental costs sewerage	000 RSD	-	7,502	22,805	40,589	42,657	44,462	46,434	48,590	50,782	53,172	93,418	219,916
overhead costs	000 RSD	3,168	3,547	4,160	8,913	9,696	10,549	11,481	12,497	13,360	14,284	28,003	63,288
<b>Total</b>	000 RSD	18,807	28,036	45,250	170,075	179,159	188,262	198,074	208,645	218,832	229,857	418,433	921,589
<b>Cost structure for overhead costs</b>													
Wages and Salaries	000 RSD	10,140	10,862	11,748	15,625	17,063	18,633	20,347	22,219	23,801	25,495	50,718	115,774
Employee benefits	000 RSD	-	-	-	3,125	3,413	3,727	4,069	4,444	4,760	5,099	10,144	23,155
Other materials	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-
Energy (Electricity)	000 RSD	67	74	82	90	99	110	121	133	147	162	429	1,383
Transport services	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-
Repair services	000 RSD	44	46	49	51	54	57	60	63	66	69	110	193
Other services	000 RSD	899	942	990	1,040	1,095	1,153	1,214	1,278	1,339	1,403	2,239	3,920
Taxes and fees	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation	000 RSD	475	475	475	475	475	475	475	475	475	475	475	475
Other costs	000 RSD	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	000 RSD	11,626	12,400	13,344	20,407	22,199	24,154	26,286	28,612	30,588	32,704	64,115	144,900
<b>Staffing schedule &amp; costs</b>													
<b>Water Supply</b>		<b>36</b>	<b>36</b>	<b>36</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>
Head of water supply	No.	-	-	-	1	1	1	1	1	1	1	1	1
Unit supervisor water treatment & c	No.	1	1	1	1	1	1	1	1	1	1	1	1
Foreman	No.	1	1	1	1	1	1	1	1	1	1	1	1
Technicians	No.	14	14	14	14	14	14	14	14	14	14	14	14
Support services	No.	1	1	1	1	1	1	1	1	1	1	1	1
Unit supervisor meeting & water s	No.	1	1	1	1	1	1	1	1	1	1	1	1
Technicians	No.	12	12	12	12	12	12	12	12	12	12	12	12
Support services	No.	6	6	6	6	6	6	6	6	6	6	6	6
<b>Waste water - existing</b>		<b>15</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>
Head of waste water	No.	1	1	1	1	1	1	1	1	1	1	1	1
Unit supervisor sewage pumps & v	No.	-	-	-	1	1	1	1	1	1	1	1	1
Foreman	No.	1	1	1	1	1	1	1	1	1	1	1	1
Technicians	No.	12	12	12	12	12	12	12	12	12	12	12	12
Support services	No.	1	1	1	1	1	1	1	1	1	1	1	1
<b>Waste water - sewerage new</b>		<b>-</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
Technicians for 7 FCS	No.	-	1	3	5	5	5	5	5	5	5	5	5
<b>WWTP - new</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
Unit supervisor WWTP operations	No.	-	-	-	1	1	1	1	1	1	1	1	1
Technicians	No.	-	-	-	7	7	7	7	7	7	7	7	7
Support services	No.	-	-	-	2	2	2	2	2	2	2	2	2

Operational expenditures		1	2	3	4	5	6	7	8	9	10	20	32
Financial year ending	Units	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Overhead</b>		<b>13</b>	<b>13</b>	<b>13</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>22</b>	<b>22</b>
General manager	No.				1	1	1	1	1	1	1	1	1
Technical manager	No.	1	1	1	1	1	1	1	1	1	1	1	1
Head of legal-adm deprtament	No.	1	1	1	1	1	1	1	1	1	1	1	1
IT expert	No.				1	1	1	1	1	1	1	1	1
HR assistant	No.				1	1	1	1	1	1	1	1	1
Env. prrotection assistant	No.				1	1	1	1	1	1	1	1	1
Adm. Assistant	No.	1	1	1	1	1	1	1	1	1	1	1	1
security	No.	3	3	3	3	3	3	3	3	3	3	3	3
cleaning	No.	2	2	2	2	2	2	2	2	2	2	2	2
driver	No.				1	1	1	1	1	1	1	1	1
Head of fin-ec department	No.	1	1	1	1	1	1	1	1	1	1	1	1
Planner	No.	1	1	1	1	1	1	1	1	1	1	1	1
Accountant	No.	2	2	2	2	2	2	2	2	2	2	2	2
Complaints/info officer	No.	1	1	1	1	1	1	1	1	1	1	1	1
Billing/collection officers	No.				4	4	4	4	4	4	4	4	4
<b>Total new PUC</b>	No.	<b>64</b>	<b>65</b>	<b>67</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>90</b>
<b>Water Supply</b>	<b>000 RSD</b>	<b>18,125</b>	<b>19,415</b>	<b>20,999</b>	<b>23,680</b>	<b>25,858</b>	<b>28,237</b>	<b>30,835</b>	<b>33,672</b>	<b>36,069</b>	<b>38,637</b>	<b>76,862</b>	<b>175,452</b>
Head of water supply	000 RSD	-	-	-	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
Unit supervisor water treatment & c	000 RSD	771	826	894	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
Foreman	000 RSD	643	688	745	805	880	960	1,049	1,145	1,227	1,314	2,614	5,968
Technicians	000 RSD	7,198	7,711	8,340	9,021	9,851	10,757	11,747	12,827	13,741	14,719	29,281	66,839
Support services	000 RSD	386	413	447	483	528	576	629	687	736	789	1,569	3,581
Unit supervisor meetring & water s	000 RSD	643	688	745	805	880	960	1,049	1,145	1,227	1,314	2,614	5,968
Technicians	000 RSD	6,170	6,609	7,149	7,732	8,443	9,220	10,069	10,995	11,778	12,616	25,098	57,290
Support services	000 RSD	2,314	2,479	2,681	2,900	3,166	3,458	3,776	4,123	4,417	4,731	9,412	21,484
<b>Waste water - existing</b>	<b>000 RSD</b>	<b>7,970</b>	<b>8,537</b>	<b>9,234</b>	<b>10,954</b>	<b>11,962</b>	<b>13,062</b>	<b>14,264</b>	<b>15,576</b>	<b>16,685</b>	<b>17,873</b>	<b>35,555</b>	<b>81,161</b>
Head of waste water	000 RSD	771	826	894	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
Unit supervisor sewage pumps & V	000 RSD	-	-	-	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
Foreman	000 RSD	643	688	745	805	880	960	1,049	1,145	1,227	1,314	2,614	5,968
Technicians	000 RSD	6,170	6,609	7,149	7,732	8,443	9,220	10,069	10,995	11,778	12,616	25,098	57,290
Support services	000 RSD	386	413	447	483	528	576	629	687	736	789	1,569	3,581
<b>Waste water - sewerage new</b>	<b>000 RSD</b>	<b>-</b>	<b>551</b>	<b>1,787</b>	<b>3,222</b>	<b>3,518</b>	<b>3,842</b>	<b>4,195</b>	<b>4,581</b>	<b>4,907</b>	<b>5,257</b>	<b>10,457</b>	<b>23,871</b>
Technicians for 7 FCS	000 RSD	-	551	1,787	3,222	3,518	3,842	4,195	4,581	4,907	5,257	10,457	23,871
<b>WWTP - new</b>	<b>000 RSD</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,443</b>	<b>7,036</b>	<b>7,684</b>	<b>8,390</b>	<b>9,162</b>	<b>9,815</b>	<b>10,514</b>	<b>20,915</b>	<b>47,742</b>
Unit supervisor WWTP operations	000 RSD	-	-	-	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
Technicians	000 RSD	-	-	-	4,510	4,925	5,378	5,873	6,414	6,870	7,359	14,640	33,419
Support services	000 RSD	-	-	-	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161

Operational expenditures													
Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Overhead	000 RSD	7,198	7,711	8,340	15,625	17,063	18,633	20,347	22,219	23,801	25,495	50,718	115,774
General manager	000 RSD	-	-	-	1,128	1,231	1,345	1,468	1,603	1,718	1,840	3,660	8,355
Technical manager	000 RSD	771	826	894	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
Head of legal-adm deprtment	000 RSD	771	826	894	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
IT expert	000 RSD	-	-	-	805	880	960	1,049	1,145	1,227	1,314	2,614	5,968
HR assistant	000 RSD	-	-	-	644	704	768	839	916	981	1,051	2,091	4,774
Env. protection assistant	000 RSD	-	-	-	805	880	960	1,049	1,145	1,227	1,314	2,614	5,968
Adm. Assistant	000 RSD	514	551	596	644	704	768	839	916	981	1,051	2,091	4,774
security	000 RSD	1,157	1,239	1,340	1,450	1,583	1,729	1,888	2,062	2,208	2,366	4,706	10,742
cleaning	000 RSD	771	826	894	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
driver	000 RSD	-	-	-	644	704	768	839	916	981	1,051	2,091	4,774
Head of fin-ec department	000 RSD	771	826	894	967	1,055	1,153	1,259	1,374	1,472	1,577	3,137	7,161
Planner	000 RSD	643	688	745	805	880	960	1,049	1,145	1,227	1,314	2,614	5,968
Accountant	000 RSD	1,285	1,377	1,489	1,611	1,759	1,921	2,098	2,291	2,454	2,628	5,229	11,935
Complaints/info officer	000 RSD	514	551	596	644	704	768	839	916	981	1,051	2,091	4,774
Billing/collection officers	000 RSD	-	-	-	2,577	2,814	3,073	3,356	3,665	3,926	4,205	8,366	19,097
Total	000 RSD	33,293	36,214	40,361	59,924	65,437	71,457	78,031	85,210	91,277	97,776	194,507	444,000

**Tariff & affordability**

Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
<b>Affordability domestic users</b>													
Average household income	RSD	41,678	44,646	48,289	52,229	57,034	62,282	68,011	74,268	79,556	85,221	169,532	386,988
Average number of residents per household		3.02	3.02	3.01	3.00	2.99	2.98	2.97	2.96	2.95	2.94	2.86	2.80
Average water bill	RSD	332	349	367	386	445	491	530	574	616	661	1,250	2,813
Average sewerage bill	RSD	166	175	184	193	203	213	223	253	280	309	559	1,207
Average waste water treatment bill	RSD	-	-	-	270	284	298	313	328	344	361	580	1,037
Total average bill	RSD	499	524	551	849	932	1,002	1,066	1,155	1,241	1,331	2,389	5,058
Increase of an average bill	%	6.4%	5.1%	5.1%	54.2%	9.8%	7.4%	6.5%	8.3%	7.4%	7.3%	6.1%	6.8%
Maximum affordability level	RSD	1,667	1,786	1,932	2,089	2,281	2,491	2,720	2,971	3,182	3,409	6,781	15,480
<b>Affordability Ratio</b>	%	<b>1.2%</b>	<b>1.2%</b>	<b>1.1%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.4%</b>	<b>1.3%</b>
<b>Affordability large industries</b>													
Carnex revenues	RSD m	6,651	7,332	8,083	8,911	9,823	10,829	11,938	13,161	14,508	15,994	42,398	136,589
Vital revenues	RSD m	6,677	7,360	8,114	8,945	9,861	10,871	11,984	13,211	14,564	16,055	42,560	137,112
Carnex sewage charge	RSD m				62	60	57	55	55	55	54	61	74
Vital sewage charge	RSD m				23	22	21	20	20	20	20	22	27
Carnex affordability	%				0.7%	0.6%	0.5%	0.5%	0.4%	0.4%	0.3%	0.1%	0.1%
Vital affordability	%				0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%
<b>Tariff summary (excl. VAT)</b>													
<b>Drinking water</b>													
Domestic	RSD / m3	25	26	27	29	33	36	39	43	46	49	94	213
Institutional users	RSD / m3	25	26	27	29	33	36	39	43	46	49	94	213
Business - small	RSD / m3	49	52	54	57	59	59	57	56	54	52	94	213
Business - large	RSD / m3												
<b>Waste water treatment</b>													
Domestic	RSD / m3	-	-	-	20	21	22	23	24	26	27	44	78
Institutional users	RSD / m3	-	-	-	20	21	22	23	24	26	27	44	78
Business - small	RSD / m3	-	-	-	20	21	22	23	24	26	27	44	78
Business - large	RSD / m3	-	-	-	30	32	33	35	36	38	40	65	118
Business - large discharged wastewater	RSD / m3	-	-	-	33	35	37	39	41	43	45	73	131
<b>Sewerage</b>													
Domestic	RSD / m3	12	13	14	14	15	16	17	19	21	23	42	91
Institutional users	RSD / m3	12	13	14	14	15	16	17	19	21	23	42	91
Business - small	RSD / m3	25	26	27	29	27	26	24	25	25	24	42	91
Business - large	RSD / m3	-	-	-	29	27	26	24	25	25	24	42	91
Business - large discharged wastewater	RSD / m3	-	-	-	32	30	28	27	27	27	27	47	101
<b>Total W&amp;WW (RSD)</b>													
Domestic	RSD / m3	37	39	41	63	69	74	79	86	92	99	180	382
Institutional users	RSD / m3	37	39	41	63	69	74	79	86	92	99	180	382
Business - small	RSD / m3	74	78	82	106	107	106	105	105	104	103	180	382
Business - large	RSD / m3	-	-	-	59	58	59	59	61	63	65	108	209
Business - large discharged wastewater	RSD / m3	-	-	-	65	65	65	65	68	70	72	119	232
<b>Total W&amp;WW (€)</b>													
Domestic	€ / m3	0.46	0.49	0.51	0.79	0.86	0.92	0.97	1.05	1.12	1.20	2.08	4.20
Institutional users	€ / m3	0.46	0.49	0.51	0.79	0.86	0.92	0.97	1.05	1.12	1.20	2.08	4.20
Business - small	€ / m3	0.93	0.97	1.02	1.32	1.34	1.32	1.29	1.29	1.27	1.26	2.08	4.20
Business - large	€ / m3	-	-	-	0.73	0.73	0.73	0.73	0.75	0.77	0.79	1.25	2.29
Business - large discharged wastewater	€ / m3	-	-	-	0.82	0.81	0.81	0.81	0.83	0.85	0.87	1.39	2.55



**Tariff & affordability**

Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
<b>Tariff summary - % increase year-on-year avg</b>													
Drinking water													
Domestic	%	6%	5%	5%	5%	15%	10%	8%	8%	7%	7%	7%	7%
Institutional users	%	6%	5%	5%	5%	15%	10%	8%	8%	7%	7%	7%	7%
Business - small	%	6%	5%	5%	5%	4%	-1%	-3%	-2%	-3%	-3%	7%	7%
Business - large	%												
Waste water treatment													
Domestic	%					5%	5%	5%	5%	5%	5%	5%	5%
Institutional users	%					5%	5%	5%	5%	5%	5%	5%	5%
Business - small	%					5%	5%	5%	5%	5%	5%	5%	5%
Business - large	%					5%	5%	5%	5%	5%	5%	5%	5%
Sewerage													
Domestic	%	6%	5%	5%	5%	5%	5%	5%	13%	11%	11%	6%	7%
Institutional users	%	6%	5%	5%	5%	5%	5%	5%	13%	11%	11%	6%	7%
Business - small	%	6%	5%	5%	5%	-6%	-6%	-6%	2%	0%	0%	6%	7%
Business - large	%					-6%	-6%	-6%	2%	0%	0%	6%	7%
Total W&WW													
Domestic	%	6%	5%	5%	54%	10%	8%	7%	8%	7%	7%	6%	7%
Institutional users	%	6%	5%	5%	54%	10%	8%	7%	8%	7%	7%	6%	7%
Business - small	%	6%	5%	5%	30%	1%	-1%	-2%	0%	-1%	-1%	6%	7%
Business - large	%					0%	0%	0%	4%	3%	3%	5%	6%
<b>Tariff summary (excl. VAT, 2007 constant prices)</b>													
Drinking water													
Domestic	RSD / m3	24	24	24	24	27	29	30	31	32	33	43	61
Institutional users	RSD / m3	24	24	24	24	27	29	30	31	32	33	43	61
Business - small	RSD / m3	47	48	48	49	49	46	44	41	38	35	43	61
Business - large	RSD / m3												
Waste water treatment													
Domestic	RSD / m3	-	-	-	17	17	17	18	18	18	18	20	22
Institutional users	RSD / m3	-	-	-	17	17	17	18	18	18	18	20	22
Business - small	RSD / m3	-	-	-	17	17	17	18	18	18	18	20	22
Business - large	RSD / m3	-	-	-	26	26	26	26	27	27	27	30	34
Sewerage													
Domestic	RSD / m3	12	12	12	12	12	12	13	14	15	16	19	26
Institutional users	RSD / m3	12	12	12	12	12	12	13	14	15	16	19	26
Business - small	RSD / m3	24	24	24	24	22	20	18	18	17	16	19	26
Business - large	RSD / m3	-	-	-	24	22	20	18	18	17	16	19	26
Total W&WW (RSD)													
Domestic	RSD / m3	36	36	36	54	57	59	60	63	65	67	82	109
Institutional users	RSD / m3	36	36	36	54	57	59	60	63	65	67	82	109
Business - small	RSD / m3	71	72	73	90	88	84	79	77	73	70	82	109
Business - large	RSD / m3	-	-	-	50	48	46	45	45	44	44	49	60

**Tariff & affordability**

Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
<b>Tariff summary - % increase year-on-year avg constant 2007 prices</b>													
Drinking water													
Domestic	%	2%	1%	1%	1%	11%	6%	4%	4%	3%	3%	3%	3%
Institutional users	%	2%	1%	1%	1%	11%	6%	4%	4%	3%	3%	3%	3%
Business - small	%	2%	1%	1%	1%	0%	-5%	-6%	-6%	-7%	-7%	3%	3%
Business - large	%												
Waste water treatment													
Domestic	%					1%	1%	1%	1%	1%	1%	1%	1%
Institutional users	%					1%	1%	1%	1%	1%	1%	1%	1%
Business - small	%					1%	1%	1%	1%	1%	1%	1%	1%
Business - large	%					1%	1%	1%	1%	1%	1%	1%	1%
Sewerage													
Domestic	%	2%	1%	1%	1%	1%	1%	1%	9%	7%	6%	2%	3%
Institutional users	%	2%	1%	1%	1%	1%	1%	1%	9%	7%	6%	2%	3%
Business - small	%	2%	1%	1%	1%	-9%	-9%	-9%	-2%	-4%	-4%	2%	3%
Business - large	%					-9%	-9%	-9%	-2%	-4%	-4%	2%	3%
Total W&WW													
Domestic	%	2%	1%	1%	48%	5%	3%	2%	4%	3%	3%	2%	3%
Institutional users	%	2%	1%	1%	48%	5%	3%	2%	4%	3%	3%	2%	3%
Business - small	%	2%	1%	1%	25%	-2%	-5%	-6%	-4%	-4%	-4%	2%	3%
Business - large	%					-4%	-4%	-3%	0%	-1%	-1%	1%	2%
<b>Tariff summary - cumulative % increase year-on-year avg constant 2007 prices</b>													
Total W&WW													
Domestic	%	2%	3%	4%	52%	58%	61%	63%	68%	71%	74%	95%	124%
Institutional users	%	2%	3%	4%	52%	58%	61%	63%	68%	71%	74%	95%	124%
Business - small	%	2%	3%	4%	29%	26%	22%	16%	12%	8%	3%	20%	48%
Business - large (discharged WW)	%	0%	0%	0%	0%	-4%	-8%	-11%	-11%	-12%	-13%	-2%	18%
<b>Tariff calculation water Vrbas municipality (town + villages)</b>													
Cost to cover - water													
operating costs & depreciation	RSD m	65	69	73	82	88	96	104	113	121	130	270	675
increase in working capital	RSD m	0	2	(3)	(4)	0	2	1	1	1	1	2	3
bad debt	RSD m	6	6	4	4	4	5	5	6	6	7	14	34
Interest and fee payment	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
DSCR over depreciation	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
Loan repayment over depreciation	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
Total Water Costs to cover	RSD m	71	76	74	82	93	102	110	119	128	138	285	712
Volume produced	'000 m3	3,638	3,685	3,732	3,780	3,828	3,871	3,914	3,958	4,002	4,046	4,406	4,743
Volume billed													
Domestic	'000 m3	2,298	2,314	2,330	2,346	2,362	2,374	2,385	2,397	2,408	2,420	2,530	2,656
Institutional users	'000 m3	186	197	208	219	230	240	251	262	273	284	370	443
Business	'000 m3	146	153	160	168	175	184	193	202	211	220	285	330
Total	'000 m3	2,630	2,664	2,698	2,732	2,767	2,798	2,830	2,861	2,893	2,925	3,185	3,428
Allow reductions in nominal tariffs?													
Unit cost of water produced	RSD / m3	20	21	20	22	24	26	28	30	32	34	65	150
Unit cost of water billed	RSD / m3	27	28	27	30	34	37	39	42	44	47	90	208
Increase unit cost water	%	16%	5%	-4%	10%	12%	9%	7%	7%	6%	6%	7%	7%
Average tariff charged	RSD / m3	26	27	29	30	35	38	41	44	46	49	94	213
% of cost recovery - domestic	%	95%	95%	94%	94%	95%	96%	97%	98%	99%	100%	100%	100%
% of cost recovery - institutional users	%	95%	95%	94%	94%	95%	96%	97%	98%	99%	100%	100%	100%
% of cost recovery - business users	%	189%	189%	189%	188%	171%	156%	141%	128%	117%	106%	100%	100%

**Tariff & affordability**

Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Calculated tariff for water													
Domestic	RSD / m3	25.66	26.95	25.87	28.28	31.93	35.08	37.79	40.78	43.71	46.79	89.57	207.65
Institutional users	RSD / m3	25.66	26.95	25.87	28.28	31.93	35.08	37.79	40.78	43.71	46.79	89.57	207.65
Business	RSD / m3	51.31	53.90	51.75	56.56	57.47	56.83	55.10	53.52	51.63	49.74	89.57	207.65
Proposed tariff for water													
Domestic	RSD / m3	24.68	25.91	27.20	28.56	32.92	36.31	39.28	42.58	45.73	49.05	94.05	212.66
Institutional users	RSD / m3	24.68	25.91	27.20	28.56	32.92	36.31	39.28	42.58	45.73	49.05	94.05	212.66
Business	RSD / m3	49.35	51.82	54.41	57.13	59.26	58.82	57.27	55.87	54.00	52.14	94.05	212.66
		2.00	2.00	2.00	2.00	1.80	1.62	1.46	1.31	1.18	1.06	1.00	1.00
Tariff increases (nominal)													
Domestic	%	6.2%	5.0%	5.0%	5.0%	15.3%	10.3%	8.2%	8.4%	7.4%	7.3%	6.9%	7.1%
Institutional users	%	6.2%	5.0%	5.0%	5.0%	15.3%	10.3%	8.2%	8.4%	7.4%	7.3%	6.9%	7.1%
Business	%	6.2%	5.0%	5.0%	5.0%	3.7%	-0.8%	-2.6%	-2.4%	-3.3%	-3.5%	6.9%	7.1%
Total revenue with proposed tariff	RSD m	68	73	78	83	96	106	115	124	134	144	300	729
<b>Tariff calculation for wastewater treatment plant</b>													
Cost to cover waste water treatment													
operating costs & depreciation	RSD m	-	-	-	100	104	108	113	118	122	128	221	438
increase in working capital	RSD m	-	-	-	-	12	0	0	0	0	0	3	2
bad debt	RSD m	-	-	-	-	6	6	6	7	7	7	12	23
Interest and fee payment	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
DSCR over depreciation	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
CAPEX injection	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
Total Waste Water costs to cover	RSD m	-	-	-	100	122	115	119	125	130	135	237	463
Volume billed													
Domestic	'000 m3				2,111	2,126	2,136	2,147	2,157	2,168	2,178	2,277	2,390
Institutional users	'000 m3				151	157	166	174	182	190	198	257	297
Business - small	'000 m3				197	207	216	226	236	246	256	333	398
Business - large	'000 m3				1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697
Total	'000 m3	-	-	-	4,156	4,187	4,216	4,244	4,272	4,301	4,330	4,564	4,783
Unit cost of wastewater treated (incl. infiltration)	RSD / m3				18	21	20	21	22	22	23	38	72
Unit cost of wastewater delivered to collection system	RSD / m3				24	29	27	28	29	30	31	52	97
Unit cost of wastewater of drinking water supplied	RSD / m3				22	26	24	25	26	27	28	47	87
Increase unit cost waste water	%					21%	-7%	4%	4%	3%	4%	6%	6%
Average tariff charged	RSD / m3				27	28	29	31	32	34	36	58	103
Average tariff charged expressed in drinking water	RSD / m3				24	25	26	28	29	31	32	52	92
% of cost recovery - domestic	%				83%	83%	83%	83%	83%	84%	84%	84%	85%
% of cost recovery - institutional users	%				83%	83%	83%	83%	83%	84%	84%	84%	85%
% of cost recovery - business small	%				83%	83%	83%	83%	83%	84%	84%	84%	85%
% of cost recovery - business large	%				125%	125%	125%	125%	125%	125%	125%	126%	127%

**Tariff & affordability**

Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
<b>Calculated tariff</b>													
Of waste water delivered to sewerage system													
Domestic	RSD / m3				19.92	24.18	22.61	23.44	24.33	25.20	26.13	43.77	82.24
Institutional users	RSD / m3				19.92	24.18	22.61	23.44	24.33	25.20	26.13	43.77	82.24
Business - small	RSD / m3				19.92	24.18	22.61	23.44	24.33	25.20	26.13	43.77	82.24
Business - large	RSD / m3				29.88	36.28	33.92	35.15	36.50	37.81	39.20	65.65	123.35
					1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Of drinking water invoiced													
Domestic	RSD / m3				17.93	21.77	20.35	21.09	21.90	22.68	23.52	39.39	74.01
Institutional users	RSD / m3				17.93	21.77	20.35	21.09	21.90	22.68	23.52	39.39	74.01
Business - small	RSD / m3				17.93	21.77	20.35	21.09	21.90	22.68	23.52	39.39	74.01
Business - large	RSD / m3												
<b>Proposed tariff</b>													
Of waste water delivered to sewerage system													
Domestic	RSD / m3				22.22	23.33	24.50	25.73	27.01	28.36	29.78	48.51	87.11
Institutional users	RSD / m3				22.22	23.33	24.50	25.73	27.01	28.36	29.78	48.51	87.11
Business - small	RSD / m3				22.22	23.33	24.50	25.73	27.01	28.36	29.78	48.51	87.11
Of drinking water invoiced													
Domestic	RSD / m3				20.00	21.00	22.05	23.15	24.31	25.53	26.80	43.66	78.40
Institutional users	RSD / m3				20.00	21.00	22.05	23.15	24.31	25.53	26.80	43.66	78.40
Business - small	RSD / m3				20.00	21.00	22.05	23.15	24.31	25.53	26.80	43.66	78.40
Business - large	RSD / m3				30.00	31.50	33.08	34.73	36.47	38.29	40.20	65.49	117.60
					1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Tariff increases (nominal)													
Domestic	%					5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Institutional users	%					5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Business - small	%					5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Business - large	%					5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Total revenue with proposed tariff	RSD m				111	118	124	131	138	146	154	263	491
<b>Tariff calculation for extension sewerage services in Vrbas villages</b>													
<b>Cost to cover</b>													
operating costs & depreciation	RSD m	-	8	24	42	44	46	48	51	53	55	98	230
increase in working capital	RSD m	-	-	1	1	2	0	0	0	0	0	0	1
bad debt	RSD m	-	-	0	1	3	3	3	3	3	3	5	10
Interest and fee payment	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
DSCR over depreciation	RSD m												
CAPEX injection	RSD m												
Total Waste Water costs to cover	RSD m	-	8	25	44	49	49	51	53	56	59	103	241
<b>Volume billed (Vrbas town + villages)</b>													
Domestic	'000 m3		1,729	2,097	2,111	2,126	2,136	2,147	2,157	2,168	2,178	2,277	2,390
Institutional users	'000 m3		130	144	151	157	166	174	182	190	198	257	297
Business - small	'000 m3		153	187	197	207	216	226	236	246	256	333	398
Business - large	'000 m3		-	-	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697
Total	'000 m3	-	2,012	2,428	4,156	4,187	4,216	4,244	4,272	4,301	4,330	4,564	4,783
Unit cost of wastewater discharged	RSD / m3		4	10	11	12	12	12	13	13	14	23	50
Unit cost of wastewater of drinking water supplied	RSD / m3		3	9	10	11	10	11	11	12	12	20	45
Increase unit cost water	%			170%	3%	10%	-1%	3%	4%	4%	4%	6%	8%
Average tariff charged	RSD / m3		4	9	14	14	13	13	13	14	14	23	45

## Tariff &amp; affordability

Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
% of cost recovery - domestic	%		93%	93%	69%	73%	78%	83%	88%	92%	97%	100%	100%
% of cost recovery - institutional users	%		93%	93%	69%	73%	78%	83%	88%	92%	97%	100%	100%
% of cost recovery - business small	%		186%	186%	137%	132%	126%	121%	115%	109%	103%	100%	100%
% of cost recovery - business large	%		186%	186%	137%	132%	126%	121%	115%	109%	103%	100%	100%
Calculated tariff													
Of waste water delivered to sewerage system													
Domestic	RSD / m3		3.57	9.62	7.34	8.63	9.10	9.98	10.96	12.02	13.16	22.61	50.40
Institutional users	RSD / m3		3.57	9.62	7.34	8.63	9.10	9.98	10.96	12.02	13.16	22.61	50.40
Business - small	RSD / m3		7.14	19.25	14.68	15.53	14.74	14.56	14.38	14.20	13.99	22.61	50.40
Business - large	RSD / m3		-	-	14.68	15.53	14.74	14.56	14.38	14.20	13.99	22.61	50.40
			2.00	2.00	2.00	1.80	1.62	1.46	1.31	1.18	1.06	1.00	1.00
Of drinking water invoiced													
Domestic	RSD / m3		3.21	8.66	6.61	7.76	8.19	8.99	9.86	10.82	11.84	20.35	45.36
Institutional users	RSD / m3		3.21	8.66	6.61	7.76	8.19	8.99	9.86	10.82	11.84	20.35	45.36
Business - small	RSD / m3		6.43	17.32	13.22	13.97	13.27	13.10	12.94	12.78	12.59	20.35	45.36
Business - large	RSD / m3												
Proposed tariff													
Of waste water delivered to sewerage system													
Domestic	RSD / m3		3.75	8.11	9.83	10.08	10.25	10.53	11.70	12.80	13.97	22.91	45.19
Institutional users	RSD / m3		3.75	8.11	9.83	10.08	10.25	10.53	11.70	12.80	13.97	22.91	45.19
Business - small	RSD / m3		7.49	16.23	19.67	18.14	16.60	15.36	15.36	15.12	14.85	22.91	45.19
Business - large	RSD / m3		-	-	19.67	18.14	16.60	15.36	15.36	15.12	14.85	22.91	45.19
			2.00	2.00	2.00	1.80	1.62	1.46	1.31	1.18	1.06	1.00	1.00
Of drinking water invoiced													
Domestic	RSD / m3		3.37	7.30	8.85	9.07	9.22	9.48	10.53	11.52	12.58	20.62	40.67
Institutional users	RSD / m3		3.37	7.30	8.85	9.07	9.22	9.48	10.53	11.52	12.58	20.62	40.67
Business - small	RSD / m3		6.74	14.60	17.70	16.32	14.94	13.82	13.82	13.61	13.37	20.62	40.67
Business - large	RSD / m3				17.70	16.32	14.94	13.82	13.82	13.61	13.37	20.62	40.67
Tariff increases (nominal)													
Domestic	%			116.6%	21.2%	2.5%	1.7%	2.8%	11.1%	9.4%	9.1%	5.0%	6.3%
Institutional users	%			116.6%	21.2%	2.5%	1.7%	2.8%	11.1%	9.4%	9.1%	5.0%	6.3%
Business - small	%			116.6%	21.2%	-7.8%	-8.5%	-7.5%	0.0%	-1.5%	-1.8%	5.0%	6.3%
Business - large	%												
Total revenue with proposed tariff	RSD m	-	8	21	59	58	55	54	57	60	62	105	216
Tariff calculation for existing sewerage services in Vrbas city													
Cost to cover													
operating costs & depreciation	RSD m	19	20	22	28	31	34	37	40	43	47	99	253
increase in working capital	RSD m	(1)	1	(0)	(1)	1	0	0	0	0	0	1	2
bad debt	RSD m	1	2	1	1	2	2	2	2	2	2	5	12
Total Waste Water costs to cover	RSD m	19	23	23	28	33	36	39	43	46	49	105	268
Volume billed (Vrbas town + villages)													
Domestic	'000 m3	1,272	1,729	2,097	2,111	2,126	2,136	2,147	2,157	2,168	2,178	2,277	2,390
Institutional users	'000 m3	102	130	144	151	157	166	174	182	190	198	257	297
Business - small	'000 m3	113	153	187	197	207	216	226	236	246	256	333	398
Business - large	'000 m3	-	-	-	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697
Total	'000 m3	1,487	2,012	2,428	4,156	4,187	4,216	4,244	4,272	4,301	4,330	4,564	4,783

**Tariff & affordability**

Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Unit cost of wastewater	RSD / m3	13	11	9	7	8	9	9	10	11	11	23	56
Unit cost of wastewater of drinking water supplied	RSD / m3	12	10	8	6	7	8	8	9	10	10	21	50
Increase unit cost water	%		-12%	-18%	-26%	17%	7%	8%	8%	7%	7%	8%	8%
Average tariff charged	RSD / m3	15	11	8	9	9	9	9	10	11	12	24	56
% of cost recovery - domestic	%	93%	93%	93%	69%	73%	78%	83%	88%	92%	97%	100%	100%
% of cost recovery - institutional users	%	93%	93%	93%	69%	73%	78%	83%	88%	92%	97%	100%	100%
% of cost recovery - business small	%	186%	186%	186%	137%	132%	126%	121%	115%	109%	103%	100%	100%
% of cost recovery - business large	%	186%	186%	186%	137%	132%	126%	121%	115%	109%	103%	100%	100%
<b>Calculated tariff</b>													
Of waste water delivered to sewerage system													
Domestic	RSD / m3	11.98	10.50	8.62	4.70	5.85	6.66	7.66	8.75	9.88	11.10	23.03	55.94
Institutional users	RSD / m3	11.98	10.50	8.62	4.70	5.85	6.66	7.66	8.75	9.88	11.10	23.03	55.94
Business - small	RSD / m3	23.97	21.00	17.23	9.40	10.54	10.78	11.17	11.49	11.67	11.80	23.03	55.94
Business - large	RSD / m3	-	-	-	9.40	10.54	10.78	11.17	11.49	11.67	11.80	23.03	55.94
		2.00	2.00	2.00	2.00	1.80	1.62	1.46	1.31	1.18	1.06	1.00	1.00
Of drinking water invoiced													
Domestic	RSD / m3	10.79	9.45	7.75	4.23	5.27	5.99	6.89	7.88	8.89	9.99	20.73	50.35
Institutional users	RSD / m3	10.79	9.45	7.75	4.23	5.27	5.99	6.89	7.88	8.89	9.99	20.73	50.35
Business - small	RSD / m3	21.57	18.90	15.51	8.46	9.48	9.71	10.05	10.34	10.50	10.62	20.73	50.35
Business - large	RSD / m3												
<b>Proposed tariff</b>													
Of waste water delivered to sewerage system													
Domestic	RSD / m3	13.71	10.65	7.00	6.04	6.59	7.25	7.84	9.09	10.27	11.54	23.77	56.18
Institutional users	RSD / m3	13.71	10.65	7.00	6.04	6.59	7.25	7.84	9.09	10.27	11.54	23.77	56.18
Business - small	RSD / m3	27.42	21.30	14.00	12.07	11.86	11.74	11.43	11.93	12.13	12.27	23.77	56.18
Business - large	RSD / m3	-	-	-	12.07	11.86	11.74	11.43	11.93	12.13	12.27	23.77	56.18
		2.00	2.00	2.00	2.00	1.80	1.62	1.46	1.31	1.18	1.06	1.00	1.00
Of drinking water invoiced													
Domestic	RSD / m3	12.34	9.58	6.30	5.43	5.93	6.52	7.05	8.18	9.24	10.39	21.40	50.57
Institutional users	RSD / m3	12.34	9.58	6.30	5.43	5.93	6.52	7.05	8.18	9.24	10.39	21.40	50.57
Business - small	RSD / m3	24.68	19.17	12.60	10.86	10.67	10.57	10.28	10.74	10.91	11.04	21.40	50.57
Business - large	RSD / m3				10.86	10.67	10.57	10.28	10.74	10.91	11.04	21.40	50.57
<b>Tariff increases (nominal)</b>													
Domestic	%	6.2%	-22.3%	-34.3%	-13.8%	9.1%	10.1%	8.1%	16.1%	12.9%	12.4%	7.4%	7.5%
Institutional users	%	6.2%	-22.3%	-34.3%	-13.8%	9.1%	10.1%	8.1%	16.1%	12.9%	12.4%	7.4%	7.5%
Business - small	%	6.2%	-22.3%	-34.3%	-13.8%	-1.8%	-1.0%	-2.7%	4.4%	1.6%	1.2%	7.4%	7.5%
Business - large	%												
Total revenue with proposed tariff	RSD m	22	23	18	37	38	39	40	44	48	51	108	269
<b>Tariff calculation for all sewerage services in Vrbas city and villag</b>													
Cost to cover waste water treatment													
operating costs & depreciation	RSD m	19	28	45	70	75	80	85	91	96	102	197	483
increase in working capital	RSD m	(1)	1	1	1	3	0	0	0	0	0	1	3
bad debt	RSD m	1	2	2	2	5	5	5	5	5	5	10	23
Interest and fee payment	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
DSCR over depreciation	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
CAPEX injection	RSD m	-	-	-	-	-	-	-	-	-	-	-	-
Total Waste Water costs to cover	RSD m	19	30	48	73	83	85	90	96	102	108	208	509

**Tariff & affordability**

Financial year ending	Units	1 2008	2 2009	3 2010	4 2011	5 2012	6 2013	7 2014	8 2015	9 2016	10 2017	20 2027	32 2039
Volume billed (Vrbas town + villages)													
Domestic	'000 m3	1,272	1,729	2,097	2,111	2,126	2,136	2,147	2,157	2,168	2,178	2,277	2,390
Institutional users	'000 m3	102	130	144	151	157	166	174	182	190	198	257	297
Business - small	'000 m3	113	153	187	197	207	216	226	236	246	256	333	398
Business - large	'000 m3	-	-	-	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697
Total	'000 m3	1,487	2,012	2,428	4,156	4,187	4,216	4,244	4,272	4,301	4,330	4,564	4,783
Unit cost of wastewater	RSD / m3	13	15	20	18	20	20	21	22	24	25	46	106
Unit cost of wastewater of drinking water supplied\	RSD / m3	12	14	18	16	18	18	19	20	21	22	41	96
Average tariff charged wastewater	RSD / m3	15	15	16	23	23	22	22	24	25	26	47	101
Average tariff charged expressed as drinking water	RSD / m3	13	14	15	21	20	20	20	21	22	24	42	91
% of cost recovery - domestic	%	93%	93%	93%	69%	73%	78%	83%	88%	92%	97%	100%	100%
% of cost recovery - institutional users	%	93%	93%	93%	69%	73%	78%	83%	88%	92%	97%	100%	100%
% of cost recovery - business small	%	186%	186%	186%	137%	132%	126%	121%	115%	109%	103%	100%	100%
% of cost recovery - business large	%	186%	186%	186%	137%	132%	126%	121%	115%	109%	103%	100%	100%
Calculated tariff													
Of waste water delivered to sewerage system													
Domestic	RSD / m3	11.98	14.24	16.73	14.54	15.93	16.90	18.19	20.46	22.68	25.08	45.94	101.13
Institutional users	RSD / m3	11.98	14.24	16.73	14.54	15.93	16.90	18.19	20.46	22.68	25.08	45.94	101.13
Business - small	RSD / m3	23.97	28.49	33.46	29.07	28.67	27.38	26.53	26.84	26.79	26.65	45.94	101.13
Business - large	RSD / m3	-	-	-	29.07	28.67	27.38	26.53	26.84	26.79	26.65	45.94	101.13
		2.00	2.00	2.00	2.00	1.80	1.62	1.46	1.31	1.18	1.06	1.00	1.00
Of drinking water invoiced													
Domestic	RSD / m3	10.79	12.66	16.42	10.84	13.03	14.18	15.88	17.74	19.71	21.84	41.08	95.71
Institutional users	RSD / m3	10.79	12.66	16.42	10.84	13.03	14.18	15.88	17.74	19.71	21.84	41.08	95.71
Business - small	RSD / m3	21.57	25.33	32.83	21.68	23.46	22.97	23.15	23.28	23.28	23.21	41.08	95.71
Business - large	RSD / m3	-	-	-	-	-	-	-	-	-	-	-	-
Proposed tariff													
Of waste water delivered to sewerage system													
Domestic	RSD / m3	13.71	14.39	15.11	15.87	16.66	17.50	18.37	20.80	23.07	25.52	46.68	101.37
Institutional users	RSD / m3	13.71	14.39	15.11	15.87	16.66	17.50	18.37	20.80	23.07	25.52	46.68	101.37
Business - small	RSD / m3	27.42	28.79	30.23	31.74	29.99	28.34	26.78	27.29	27.25	27.12	46.68	101.37
Business - large	RSD / m3	-	-	-	31.74	29.99	28.34	26.78	27.29	27.25	27.12	46.68	101.37
		2.00	2.00	2.00	2.00	1.80	1.62	1.46	1.31	1.18	1.06	1.00	1.00
Of drinking water invoiced													
Domestic	RSD / m3	12.34	12.95	13.60	14.28	15.00	15.75	16.53	18.72	20.77	22.96	42.02	91.23
Institutional users	RSD / m3	12.34	12.95	13.60	14.28	15.00	15.75	16.53	18.72	20.77	22.96	42.02	91.23
Business - small	RSD / m3	24.68	25.91	27.20	28.56	26.99	25.51	24.11	24.56	24.52	24.41	42.02	91.23
Business - large	RSD / m3	-	-	-	28.56	26.99	25.51	24.11	24.56	24.52	24.41	42.02	91.23
Tariff increases (nominal)													
Domestic	%	6.2%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	13.2%	10.9%	10.6%	6.2%	7.0%
Institutional users	%	6.2%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	13.2%	10.9%	10.6%	6.2%	7.0%
Business - small	%	6.2%	5.0%	5.0%	5.0%	-5.5%	-5.5%	-5.5%	1.9%	-0.1%	-0.5%	6.2%	7.0%
Business - large	%												
Total revenue with proposed tariff	RSD m	22	31	40	96	95	95	94	101	107	114	213	485

Profit and Loss - RSD (millions)												
Financial year ending	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Revenue</b>												
Drinking water	69	74	79	84	97	107	116	125	135	144	300	729
Sewerage service	22	31	40	96	95	95	94	101	107	114	213	485
Waste water treatment	-	-	-	111	118	124	131	138	146	154	263	491
Other	-	-	-	-	-	-	-	-	-	-	-	-
Subsidies	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>91</b>	<b>105</b>	<b>119</b>	<b>292</b>	<b>310</b>	<b>326</b>	<b>341</b>	<b>365</b>	<b>388</b>	<b>412</b>	<b>775</b>	<b>1,705</b>
<b>Expenditure</b>												
<b>Variable costs</b>	<b>14</b>	<b>17</b>	<b>22</b>	<b>59</b>	<b>65</b>	<b>71</b>	<b>77</b>	<b>84</b>	<b>92</b>	<b>100</b>	<b>243</b>	<b>738</b>
Chemicals	1	1	1	4	5	5	5	5	5	6	9	15
Electricity	11	14	18	35	40	44	49	55	61	68	191	650
Fuel & lubricant	3	3	3	3	3	3	3	4	4	4	7	11
Sludge transport	-	-	-	4	4	4	4	5	5	5	10	20
Effluent discharge fee	-	-	-	13	14	15	15	16	17	17	26	42
<b>Fixed costs</b>	<b>63</b>	<b>69</b>	<b>79</b>	<b>122</b>	<b>131</b>	<b>141</b>	<b>152</b>	<b>164</b>	<b>174</b>	<b>185</b>	<b>341</b>	<b>723</b>
Wages and Salaries	27	30	33	45	50	54	59	65	69	74	148	337
Employee benefits	5	6	6	9	9	10	11	12	13	14	28	64
Other materials	3	4	4	4	4	4	4	5	5	5	7	12
Transport services	0	0	0	0	0	0	0	0	0	0	0	0
Repair services	13	15	19	36	38	40	42	44	46	48	77	135
Other services	3	3	4	8	8	9	9	10	10	11	17	30
Taxes and fees	-	-	-	-	-	-	-	-	-	-	-	-
Other costs	-	-	-	-	-	-	-	-	-	-	-	-
Overhead costs	12	12	13	20	22	24	26	29	31	33	64	145
<b>Operating costs</b>	<b>77</b>	<b>86</b>	<b>100</b>	<b>182</b>	<b>197</b>	<b>213</b>	<b>230</b>	<b>248</b>	<b>266</b>	<b>285</b>	<b>584</b>	<b>1,461</b>
Depreciation	6	10	18	70	71	71	72	73	74	75	104	136
Bad debt	7	5	6	15	15	16	17	18	19	21	39	85
<b>Total costs</b>	<b>91</b>	<b>102</b>	<b>125</b>	<b>266</b>	<b>283</b>	<b>300</b>	<b>319</b>	<b>340</b>	<b>359</b>	<b>380</b>	<b>727</b>	<b>1,681</b>
<b>Net Operating Income</b>	<b>1</b>	<b>3</b>	<b>(6)</b>	<b>25</b>	<b>27</b>	<b>25</b>	<b>22</b>	<b>25</b>	<b>29</b>	<b>32</b>	<b>48</b>	<b>23</b>
Interest charges	-	-	-	-	-	-	-	-	-	-	-	-
FX loss (gain)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Income before Tax</b>	<b>1</b>	<b>3</b>	<b>(6)</b>	<b>25</b>	<b>27</b>	<b>25</b>	<b>22</b>	<b>25</b>	<b>29</b>	<b>32</b>	<b>48</b>	<b>23</b>
Income tax	-	0	-	2	3	3	2	3	3	3	5	2
<b>Net Income after Tax</b>	<b>1</b>	<b>3</b>	<b>(6)</b>	<b>23</b>	<b>24</b>	<b>23</b>	<b>20</b>	<b>23</b>	<b>26</b>	<b>29</b>	<b>43</b>	<b>21</b>



## Profit and Loss - EURO (millions)

Financial year ending	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Revenue</b>													
Drinking water	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	3.5	8.0
Sewerage service	0.2	0.3	0.4	0.5	1.2	1.2	1.2	1.2	1.2	1.3	1.4	2.5	5.3
Waste water treatment	-	-	-	-	1.4	1.5	1.5	1.6	1.7	1.8	1.9	3.0	5.4
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Subsidies	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1.0</b>	<b>1.1</b>	<b>1.3</b>	<b>1.5</b>	<b>3.7</b>	<b>3.9</b>	<b>4.0</b>	<b>4.2</b>	<b>4.5</b>	<b>4.7</b>	<b>5.0</b>	<b>9.0</b>	<b>18.7</b>
<b>Expenditure</b>													
<b>Variable costs</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.7</b>	<b>0.8</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>1.2</b>	<b>2.8</b>	<b>8.1</b>
Chemicals	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Electricity	0.1	0.1	0.2	0.2	0.4	0.5	0.5	0.6	0.7	0.7	0.8	2.2	7.1
Fuel & lubricant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Sludge transport	-	-	-	-	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Effluent discharge fee	-	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5
<b>Fixed costs</b>	<b>0.7</b>	<b>0.8</b>	<b>0.9</b>	<b>1.0</b>	<b>1.5</b>	<b>1.6</b>	<b>1.8</b>	<b>1.9</b>	<b>2.0</b>	<b>2.1</b>	<b>2.3</b>	<b>4.0</b>	<b>7.9</b>
Wages and Salaries	0.3	0.3	0.4	0.4	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.7	3.7
Employee benefits	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.7
Other materials	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Transport services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repair services	0.1	0.2	0.2	0.2	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.9	1.5
Other services	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3
Taxes and fees	-	-	-	-	-	-	-	-	-	-	-	-	-
Other costs	-	-	-	-	-	-	-	-	-	-	-	-	-
Overhead costs	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.7	1.6
<b>Operating costs</b>	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>1.3</b>	<b>2.3</b>	<b>2.5</b>	<b>2.6</b>	<b>2.8</b>	<b>3.1</b>	<b>3.3</b>	<b>3.5</b>	<b>6.8</b>	<b>16.1</b>
Depreciation	0.0	0.1	0.1	0.2	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.2	1.5
Bad debt	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.9
<b>Total costs</b>	<b>1.0</b>	<b>1.1</b>	<b>1.3</b>	<b>1.6</b>	<b>3.3</b>	<b>3.5</b>	<b>3.7</b>	<b>3.9</b>	<b>4.2</b>	<b>4.4</b>	<b>4.6</b>	<b>8.4</b>	<b>18.5</b>
<b>Net Operating Income</b>	<b>(0.0)</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.1)</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>0.6</b>	<b>0.3</b>
Interest charges	-	-	-	-	-	-	-	-	-	-	-	-	-
FX loss (gain)	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Income before Tax</b>	<b>(0.0)</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.1)</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>0.6</b>	<b>0.3</b>
Income tax	-	-	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
<b>Net Income after Tax</b>	<b>(0.0)</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.1)</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.5</b>	<b>0.2</b>

## Balance Sheet - RSD (millions)

Financial year ending	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Fixed assets</b>	362	1,263	2,155	2,092	2,037	1,984	1,928	1,870	1,812	1,756	1,940	1,160
<b>Current assets</b>												
Inventories	0	1	1	1	1	1	1	2	2	2	4	11
Receivables	24	22	20	42	45	49	52	55	58	62	118	271
Cash	4	16	26	100	179	256	332	414	498	585	843	2,111
<b>Total</b>	<b>29</b>	<b>39</b>	<b>47</b>	<b>143</b>	<b>225</b>	<b>305</b>	<b>385</b>	<b>470</b>	<b>558</b>	<b>648</b>	<b>965</b>	<b>2,393</b>
Non-operating	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total assets</b>	<b>390</b>	<b>1,302</b>	<b>2,203</b>	<b>2,234</b>	<b>2,263</b>	<b>2,289</b>	<b>2,313</b>	<b>2,340</b>	<b>2,370</b>	<b>2,404</b>	<b>2,905</b>	<b>3,553</b>
Equity bf	180	378	1,288	2,188	2,213	2,240	2,265	2,287	2,312	2,341	2,796	3,379
Retained earnings	1	3	(6)	25	27	25	22	25	29	32	48	23
Grants	196	907	906	-	-	-	-	-	-	-	-	-
<b>Equity cf</b>	<b>378</b>	<b>1,288</b>	<b>2,188</b>	<b>2,213</b>	<b>2,240</b>	<b>2,265</b>	<b>2,287</b>	<b>2,312</b>	<b>2,341</b>	<b>2,373</b>	<b>2,844</b>	<b>3,402</b>
<b>Long term liabilities</b>												
Equity	378	1,288	2,188	2,213	2,240	2,265	2,287	2,312	2,341	2,373	2,844	3,402
Long-term liabilities	5	5	5	5	5	5	5	5	5	5	5	5
<b>Total</b>	<b>383</b>	<b>1,293</b>	<b>2,193</b>	<b>2,218</b>	<b>2,245</b>	<b>2,270</b>	<b>2,292</b>	<b>2,317</b>	<b>2,346</b>	<b>2,378</b>	<b>2,849</b>	<b>3,407</b>
<b>Current liabilities</b>												
Payables	8	8	10	16	18	19	21	23	24	26	56	146
Overdraft	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>16</b>	<b>18</b>	<b>19</b>	<b>21</b>	<b>23</b>	<b>24</b>	<b>26</b>	<b>56</b>	<b>146</b>
Non-operating	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total liabilities</b>	<b>390</b>	<b>1,302</b>	<b>2,203</b>	<b>2,234</b>	<b>2,263</b>	<b>2,289</b>	<b>2,313</b>	<b>2,340</b>	<b>2,370</b>	<b>2,404</b>	<b>2,905</b>	<b>3,553</b>
<b>Key ratios</b>												
Current ratio	3.6	4.6	4.9	8.7	12.6	15.8	18.4	20.7	22.9	24.7	17.3	16.4
Leverage	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

## Balance Sheet - EURO (millions)

Financial year ending	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2027	2039
<b>Fixed assets</b>	2.1	4.5	15.8	27.0	26.2	25.4	24.6	23.8	23.0	22.2	21.4	22.5	12.7
	2.1	4.5	15.8	27.0	26.2	25.4	24.6	23.8	23.0	22.2	21.4	22.5	12.7
<b>Current assets</b>													
Inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Receivables	0.3	0.3	0.3	0.3	0.5	0.6	0.6	0.6	0.7	0.7	0.7	1.4	3.0
Cash	0.0	0.0	0.2	0.3	1.3	2.2	3.2	4.1	5.1	6.1	7.1	9.8	23.2
<b>Total</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>	<b>1.8</b>	<b>2.8</b>	<b>3.8</b>	<b>4.8</b>	<b>5.8</b>	<b>6.8</b>	<b>7.9</b>	<b>11.2</b>	<b>26.3</b>
Non-operating	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total assets</b>	<b>2.5</b>	<b>4.9</b>	<b>16.3</b>	<b>27.6</b>	<b>28.0</b>	<b>28.2</b>	<b>28.4</b>	<b>28.6</b>	<b>28.7</b>	<b>29.0</b>	<b>29.2</b>	<b>33.7</b>	<b>39.0</b>
Equity bf	0.9	2.3	4.7	16.1	27.4	27.6	27.8	28.0	28.1	28.3	28.5	32.4	37.1
Retained earnings	(0.0)	0.0	0.0	(0.1)	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.3
Grants	1.4	2.5	11.4	11.4	-	-	-	-	-	-	-	-	-
<b>Equity cf</b>	<b>2.3</b>	<b>4.7</b>	<b>16.1</b>	<b>27.4</b>	<b>27.7</b>	<b>27.9</b>	<b>28.1</b>	<b>28.2</b>	<b>28.4</b>	<b>28.6</b>	<b>28.9</b>	<b>33.0</b>	<b>37.4</b>
<b>Long term liabilities</b>	2.3	4.7	16.1	27.4	27.7	27.9	28.1	28.2	28.4	28.6	28.9	33.0	37.4
Equity	2.3	4.7	16.1	27.4	27.7	27.9	28.1	28.2	28.4	28.6	28.9	33.0	37.4
Long-term liabilities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Total</b>	<b>2.3</b>	<b>4.8</b>	<b>16.2</b>	<b>27.5</b>	<b>27.8</b>	<b>28.0</b>	<b>28.2</b>	<b>28.3</b>	<b>28.5</b>	<b>28.7</b>	<b>28.9</b>	<b>33.0</b>	<b>37.4</b>
<b>Current liabilities</b>													
Payables	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.6	1.6
Overdraft	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.6</b>	<b>1.6</b>
Non-operating	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total liabilities</b>	<b>2.5</b>	<b>4.9</b>	<b>16.3</b>	<b>27.6</b>	<b>28.0</b>	<b>28.2</b>	<b>28.4</b>	<b>28.6</b>	<b>28.7</b>	<b>29.0</b>	<b>29.2</b>	<b>33.7</b>	<b>39.0</b>
<b>Key ratios</b>													
Current ratio	2.4	3.6	4.6	4.9	8.7	12.6	15.8	18.4	20.7	22.9	24.7	17.3	16.4
Leverage	2.7%	1.3%	0.4%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%

## Cash Flow - RSD (millions)

Financial year ending	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2024	2025	2026	2027	2039
Cash bf	2	4	16	26	100	179	256	332	414	498	1,162	1,222	624	732	2,029
Overdraft bf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net cash bf</b>	<b>2</b>	<b>4</b>	<b>16</b>	<b>26</b>	<b>100</b>	<b>179</b>	<b>256</b>	<b>332</b>	<b>414</b>	<b>498</b>	<b>1,162</b>	<b>1,222</b>	<b>624</b>	<b>732</b>	<b>2,029</b>
<b>Revenue</b>															
Water sales	69	74	79	84	97	107	116	125	135	144	241	259	278	300	729
Sewerage service	22	31	40	96	95	95	94	101	107	114	175	187	200	213	485
Waste water treatment	-	-	-	111	118	124	131	138	146	154	225	237	249	263	491
Less bad debt	(7)	(5)	(6)	(15)	(15)	(16)	(17)	(18)	(19)	(21)	(32)	(34)	(36)	(39)	(85)
<b>Total</b>	<b>84</b>	<b>100</b>	<b>113</b>	<b>277</b>	<b>294</b>	<b>309</b>	<b>324</b>	<b>347</b>	<b>369</b>	<b>392</b>	<b>608</b>	<b>649</b>	<b>691</b>	<b>736</b>	<b>1,619</b>
<b>Costs</b>															
<b>Variable costs</b>	14	17	22	59	65	71	77	84	92	100	186	203	222	243	738
Chemicals	1	1	1	4	5	5	5	5	5	6	8	8	9	9	15
Electricity	11	14	18	35	40	44	49	55	61	68	141	156	173	191	650
Fuel & lubricant	3	3	3	3	3	3	3	4	4	4	6	6	6	7	11
Sludge transport	-	-	-	4	4	4	4	5	5	5	8	9	9	10	20
Effluent discharge fee	-	-	-	13	14	15	15	16	17	17	23	24	25	26	42
<b>Fixed costs</b>	63	69	79	122	131	141	152	164	174	185	284	302	321	341	723
Wages and Salaries	27	30	33	45	50	54	59	65	69	74	120	129	138	148	337
Employee benefits	5	6	6	9	9	10	11	12	13	14	23	24	26	28	64
Other materials	3	4	4	4	4	4	4	5	5	5	7	7	7	7	12
Transport services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Repair services	13	15	19	36	38	40	42	44	46	48	67	70	74	77	135
Other services	3	3	4	8	8	9	9	10	10	11	15	16	16	17	30
Taxes and fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overhead costs	12	12	13	20	22	24	26	29	31	33	52	56	60	64	145
<b>Total</b>	<b>77</b>	<b>86</b>	<b>100</b>	<b>182</b>	<b>197</b>	<b>213</b>	<b>230</b>	<b>246</b>	<b>266</b>	<b>285</b>	<b>469</b>	<b>505</b>	<b>543</b>	<b>584</b>	<b>1,461</b>
<b>Working capital required</b>	(2)	2	3	(15)	(2)	(2)	(2)	(2)	(2)	(2)	(3)	(3)	(6)	(4)	(8)
<b>Operating cash flow</b>	<b>5</b>	<b>16</b>	<b>16</b>	<b>80</b>	<b>95</b>	<b>95</b>	<b>93</b>	<b>97</b>	<b>101</b>	<b>105</b>	<b>136</b>	<b>141</b>	<b>143</b>	<b>149</b>	<b>150</b>
Capex subsidy	196	14	11	-	-	-	-	-	-	-	-	-	-	-	-
Capex	196	907	906	-	-	-	-	-	-	-	45	706	-	-	-
Discretionary capex	2	4	5	6	16	18	16	15	17	18	31	33	35	38	68
<b>Investment cash flow</b>	<b>2</b>	<b>897</b>	<b>900</b>	<b>6</b>	<b>16</b>	<b>18</b>	<b>16</b>	<b>15</b>	<b>17</b>	<b>18</b>	<b>76</b>	<b>738</b>	<b>35</b>	<b>38</b>	<b>68</b>
Credit / overdraft interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Debt drawdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grants	-	893	895	-	-	-	-	-	-	-	-	-	-	-	-
<b>Financing cash flow</b>	<b>-</b>	<b>893</b>	<b>895</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Cash for debt service</b>	<b>2</b>	<b>12</b>	<b>10</b>	<b>74</b>	<b>79</b>	<b>77</b>	<b>77</b>	<b>82</b>	<b>84</b>	<b>87</b>	<b>60</b>	<b>(598)</b>	<b>107</b>	<b>111</b>	<b>82</b>
Capital repayment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest and fee payment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total debt service</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net change in cash</b>	<b>2</b>	<b>12</b>	<b>10</b>	<b>74</b>	<b>79</b>	<b>77</b>	<b>77</b>	<b>82</b>	<b>84</b>	<b>87</b>	<b>60</b>	<b>(598)</b>	<b>107</b>	<b>111</b>	<b>82</b>
Cash cf	4	16	26	100	179	256	332	414	498	585	1,222	624	732	843	2,111
Overdraft cf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net cash cf</b>	<b>4</b>	<b>16</b>	<b>26</b>	<b>100</b>	<b>179</b>	<b>256</b>	<b>332</b>	<b>414</b>	<b>498</b>	<b>585</b>	<b>1,222</b>	<b>624</b>	<b>732</b>	<b>843</b>	<b>2,111</b>

## Cash Flow - EURO (millions)

Financial year ending	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2024	2025	2026	2027	2039
Cash bf	0.0	0.0	0.2	0.3	1.2	2.2	3.2	4.1	5.1	6.1	13.7	14.3	7.3	8.5	22.3
Overdraft bf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net cash bf</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>0.3</b>	<b>1.2</b>	<b>2.2</b>	<b>3.2</b>	<b>4.1</b>	<b>5.1</b>	<b>6.1</b>	<b>13.7</b>	<b>14.3</b>	<b>7.3</b>	<b>8.5</b>	<b>22.3</b>
<b>Revenue</b>															
Water sales	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.8	3.0	3.2	3.5	8.0
Sewerage service	0.3	0.4	0.5	1.2	1.2	1.2	1.2	1.2	1.3	1.4	2.1	2.2	2.3	2.5	5.3
Waste water treatment	-	-	-	1.4	1.5	1.5	1.6	1.7	1.8	1.9	2.6	2.8	2.9	3.0	5.4
Less bad debt	(0.1)	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)	(0.4)	(0.4)	(0.4)	(0.4)	(0.9)
<b>Total</b>	<b>1.1</b>	<b>1.3</b>	<b>1.4</b>	<b>3.5</b>	<b>3.7</b>	<b>3.8</b>	<b>4.0</b>	<b>4.3</b>	<b>4.5</b>	<b>4.8</b>	<b>7.2</b>	<b>7.6</b>	<b>8.1</b>	<b>8.5</b>	<b>17.8</b>
<b>Costs</b>															
<b>Variable costs</b>	0.2	0.2	0.3	0.7	0.8	0.9	1.0	1.0	1.1	1.2	2.2	2.4	2.6	2.8	8.1
Chemicals	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Electricity	0.1	0.2	0.2	0.4	0.5	0.5	0.6	0.7	0.7	0.8	1.7	1.8	2.0	2.2	7.1
Fuel & lubricant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Sludge transport	-	-	-	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Effluent discharge fee	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.5
<b>Fixed costs</b>	0.8	0.9	1.0	1.5	1.6	1.8	1.9	2.0	2.1	2.3	3.3	3.5	3.7	4.0	7.9
Wages and Salaries	0.3	0.4	0.4	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.4	1.5	1.6	1.7	3.7
Employee benefits	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.7
Other materials	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Transport services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repair services	0.2	0.2	0.2	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.9	0.9	1.5
Other services	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
Taxes and fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overhead costs	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.7	0.7	0.7	1.6
<b>Total</b>	<b>1.0</b>	<b>1.1</b>	<b>1.3</b>	<b>2.3</b>	<b>2.5</b>	<b>2.6</b>	<b>2.8</b>	<b>3.1</b>	<b>3.3</b>	<b>3.5</b>	<b>5.5</b>	<b>5.9</b>	<b>6.3</b>	<b>6.8</b>	<b>16.1</b>
<b>Working capital required</b>	(0.0)	0.0	0.0	(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.1)
<b>Operating cash flow</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>1.0</b>	<b>1.2</b>	<b>1.2</b>	<b>1.1</b>	<b>1.2</b>	<b>1.2</b>	<b>1.3</b>	<b>1.6</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>
Capex subsidy	2.5	0.2	0.1	-	-	-	-	-	-	-	-	-	-	-	-
Capex	2.5	11.4	11.4	-	-	-	-	-	-	-	0.5	8.3	-	-	-
Discretionary capex	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.7
Discretionary capex															
<b>Investment cash flow</b>	<b>0.0</b>	<b>11.2</b>	<b>11.3</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.9</b>	<b>8.6</b>	<b>0.4</b>	<b>0.4</b>	<b>0.7</b>
Credit / overdraft interest															
Debt drawdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grants	-	11.2	11.2	-	-	-	-	-	-	-	-	-	-	-	-
<b>Financing cash flow</b>	<b>-</b>	<b>11.2</b>	<b>11.2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Cash available for debt servic</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>0.7</b>	<b>(7.0)</b>	<b>1.3</b>	<b>1.3</b>	<b>0.9</b>
Capital repayment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest and fee payment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total debt service</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net change in cash</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>0.7</b>	<b>(7.0)</b>	<b>1.3</b>	<b>1.3</b>	<b>0.9</b>
Cash cf	0.0	0.2	0.3	1.3	2.2	3.2	4.1	5.1	6.1	7.1	14.4	7.3	8.5	9.8	23.2
Overdraft cf	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net cash cf</b>	<b>0.0</b>	<b>0.2</b>	<b>0.3</b>	<b>1.3</b>	<b>2.2</b>	<b>3.2</b>	<b>4.1</b>	<b>5.1</b>	<b>6.1</b>	<b>7.1</b>	<b>14.4</b>	<b>7.3</b>	<b>8.5</b>	<b>9.8</b>	<b>23.2</b>

## Financial and economic cost benefit analysis

		1	2	3	4	5	6	7	8	9	10	17	18	19	20	32
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2024	2025	2026	2027	2039
<b>Incremental demand analysis</b>																
<b>Without project</b>																
domestic	000 m3/y	1,008	1,199	1,213	1,226	1,240	1,249	1,259	1,268	1,278	1,288	1,353	1,361	1,369	1,377	1,480
institutional users	000 m3/y	96	118	123	128	133	140	147	155	162	169	212	214	216	218	247
Industry -small	000 m3/y	96	118	123	128	133	140	147	155	162	169	212	214	216	218	247
industry - big	000 m3/y															
<b>Total without project</b>	<b>000 m3/y</b>	<b>1,200</b>	<b>1,435</b>	<b>1,459</b>	<b>1,482</b>	<b>1,506</b>	<b>1,530</b>	<b>1,553</b>	<b>1,578</b>	<b>1,602</b>	<b>1,626</b>	<b>1,776</b>	<b>1,789</b>	<b>1,802</b>	<b>1,814</b>	<b>1,973</b>
<b>With project</b>																
domestic	000 m3/y	1,272	1,729	2,097	2,111	2,126	2,136	2,147	2,157	2,168	2,178	2,250	2,259	2,268	2,277	2,390
institutional users	000 m3/y	102	130	144	151	157	166	174	182	190	198	247	250	253	257	297
Industry -small	000 m3/y	113	153	187	197	207	216	226	236	246	256	317	323	328	333	398
industry - big	000 m3/y	-	-	-	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697
<b>Total with project</b>	<b>000 m3/y</b>	<b>1,487</b>	<b>2,012</b>	<b>2,428</b>	<b>4,156</b>	<b>4,187</b>	<b>4,216</b>	<b>4,244</b>	<b>4,272</b>	<b>4,301</b>	<b>4,330</b>	<b>4,511</b>	<b>4,529</b>	<b>4,546</b>	<b>4,564</b>	<b>4,783</b>
<b>Incremental demand</b>																
domestic	000 m3/y	265	530	884	885	886	887	888	889	890	891	897	898	899	899	910
institutional users	000 m3/y	5	12	21	23	25	25	26	27	28	29	35	36	37	38	51
Industry -small	000 m3/y	16	35	64	69	74	76	79	81	84	87	106	109	112	115	152
industry - big	000 m3/y	-	-	-	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697
<b>Total incremental demand</b>	<b>000 m3/y</b>	<b>286</b>	<b>577</b>	<b>969</b>	<b>2,674</b>	<b>2,682</b>	<b>2,686</b>	<b>2,690</b>	<b>2,695</b>	<b>2,699</b>	<b>2,703</b>	<b>2,735</b>	<b>2,740</b>	<b>2,745</b>	<b>2,750</b>	<b>2,810</b>
<b>Revenues</b>																
Sewage existing	RSD m	18	22	24	26	27	28	30	34	38	42	69	74	79	85	200
Sewage incremental	RSD m	4	9	16	70	68	66	64	68	70	72	106	113	121	128	285
<b>Total revenues</b>	<b>RSD m</b>	<b>22</b>	<b>31</b>	<b>40</b>	<b>96</b>	<b>95</b>	<b>95</b>	<b>94</b>	<b>101</b>	<b>107</b>	<b>114</b>	<b>175</b>	<b>187</b>	<b>200</b>	<b>213</b>	<b>485</b>
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Incremental revenues</b>																
Sewerage	€ 000	52	110	196	883	852	822	795	830	852	874	1,246	1,327	1,406	1,489	3,130
Waste water treatment	€ 000	-	-	-	1,394	1,465	1,539	1,617	1,699	1,785	1,876	2,642	2,770	2,905	3,046	5,391
<b>Total incremental revenues</b>	<b>€ 000</b>	<b>52</b>	<b>110</b>	<b>196</b>	<b>2,277</b>	<b>2,317</b>	<b>2,361</b>	<b>2,412</b>	<b>2,530</b>	<b>2,638</b>	<b>2,750</b>	<b>3,888</b>	<b>4,098</b>	<b>4,311</b>	<b>4,535</b>	<b>8,521</b>
<b>Financial internal rate of return of the total investment</b>																
Sewage collection	€ 000	52	110	196	883	852	822	795	830	852	874	1,246	1,327	1,406	1,489	3,130
Waste water treatment	€ 000	-	-	-	1,394	1,465	1,539	1,617	1,699	1,785	1,876	2,642	2,770	2,905	3,046	5,391
Residual value	€ 000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,600
<b>Incremental revenues</b>	<b>€ 000</b>	<b>52</b>	<b>110</b>	<b>196</b>	<b>2,277</b>	<b>2,317</b>	<b>2,361</b>	<b>2,412</b>	<b>2,530</b>	<b>2,638</b>	<b>2,750</b>	<b>3,888</b>	<b>4,098</b>	<b>4,311</b>	<b>4,535</b>	<b>17,121</b>
Sewage collection	€ 000	-	51	160	335	363	389	417	450	484	520	879	950	1,026	1,108	2,921
Waste water treatment	€ 000	-	-	-	791	846	898	954	1,014	1,072	1,134	1,707	1,812	1,925	2,045	4,448
<b>Incremental operational costs</b>	<b>€ 000</b>	<b>-</b>	<b>51</b>	<b>160</b>	<b>1,126</b>	<b>1,209</b>	<b>1,287</b>	<b>1,370</b>	<b>1,464</b>	<b>1,556</b>	<b>1,655</b>	<b>2,586</b>	<b>2,762</b>	<b>2,950</b>	<b>3,153</b>	<b>7,369</b>
Sewage collection	€ 000	2,341	4,770	4,770												
Waste water treatment plant	€ 000	-	5,906	5,886												
Supervision	€ 000	122	695	695												
Subtotal investment costs	€ 000	2,462	11,371	11,351	-	-	-	-	-	-	-	-	-	-	-	-
Re-investment costs	€ 000	-	-	-	-	-	-	-	-	-	-	531	8,263	-	-	-
<b>Incremental investment costs</b>	<b>€ 000</b>	<b>2,462</b>	<b>11,371</b>	<b>11,351</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>531</b>	<b>8,263</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net cash flow</b>	<b>€ 000</b>	<b>(2,410)</b>	<b>(11,312)</b>	<b>(11,315)</b>	<b>1,150</b>	<b>1,108</b>	<b>1,075</b>	<b>1,041</b>	<b>1,066</b>	<b>1,082</b>	<b>1,095</b>	<b>771</b>	<b>(6,927)</b>	<b>1,361</b>	<b>1,382</b>	<b>9,752</b>
Cumulative cash flow	€ 000	(2,410)	(13,722)	(25,037)	(23,887)	(22,779)	(21,705)	(20,663)	(19,597)	(18,515)	(17,420)	(9,481)	(16,408)	(15,047)	(13,665)	11,267
Discount rate (nominal)	%															
FNPI/C	€ 000															
FRR/C	%															

## Financial and economic cost benefit analysis

	1	2	3	4	5	6	7	8	9	10	17	18	19	20	32
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2024	2025	2026	2027	2039
<b>Modified formula</b>															
<b>NPV incremental revenues</b>															
Sewage collection	€ 000	10,748													
Waste water treatment	€ 000	20,600													
Residual value	€ 000	733													
<b>Subtotal incremental revenues</b>	<b>€ 000</b>	<b>32,080</b>													
<b>NPV incremental operational costs</b>															
Sewage collection	€ 000	7,170													
Waste water treatment	€ 000	13,472													
Re-investment	€ 000	2,211													
<b>Subtotal incremental operational costs</b>	<b>€ 000</b>	<b>22,854</b>													
<b>Discounted net revenues (DNR)</b>	<b>€ 000</b>	<b>9,227</b>													
<b>NPV investment costs (DIC)</b>															
Sewage collection	€ 000	10,043													
Waste water treatment plant	€ 000	9,736													
Supervision	€ 000	1,260													
<b>Subtotal investment costs (DIC)</b>	<b>€ 000</b>	<b>21,039</b>													
Grant rate, calculated DIC/(DIC+DNR)	%	69.5%													
Grant rate, applied (max 75%)	%	69.5%													
Eligible investment cost (current prices)	€ 000	24,747													
<b>EU grant (maximum)</b>	<b>€ 000</b>	<b>17,203</b>													
<b>New definition SF/CF</b>															
<b>Step 1: funding gap rate</b>															
Discounted net revenues (DNR)	€ 000	9,227													
Discounted investment costs (DIC)	€ 000	21,039													
Eligible expenditure EE (DCI-DNR)	€ 000	11,812													
<b>Funding gap rate R (EE/DIC)</b>	<b>%</b>	<b>56.1%</b>													
<b>Step 2: decision amount</b>															
Eligible investment costs EC (current prices)	€ 000	24,747													
<b>Decision amount DA (R x EC)</b>	<b>€ 000</b>	<b>13,894</b>													
<b>Step 3: maximum EU grant</b>															
Maximum co-funding rate Crpa	%	75%													
<b>EU grant (maximum)</b>	<b>€ 000</b>	<b>10,421</b>													
<b>Financial sustainability</b>															
Total financial sources	2,462	11,371	11,351	-	-	-	-	-	-	-	-	-	-	-	-
Revenues	52	110	196	2,277	2,317	2,361	2,412	2,530	2,638	2,750	3,888	4,098	4,311	4,535	8,521
<b>Total inflows</b>	<b>2,514</b>	<b>11,481</b>	<b>11,547</b>	<b>2,277</b>	<b>2,317</b>	<b>2,361</b>	<b>2,412</b>	<b>2,530</b>	<b>2,638</b>	<b>2,750</b>	<b>3,888</b>	<b>4,098</b>	<b>4,311</b>	<b>4,535</b>	<b>8,521</b>
Total operating costs	-	51	160	1,126	1,209	1,287	1,370	1,464	1,556	1,655	2,586	2,762	2,950	3,153	7,369
Total investment costs	2,462	11,371	11,351	-	-	-	-	-	-	-	531	8,263	-	-	-
Interest on loans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retirement bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loan principal repayment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total outflows</b>	<b>2,462</b>	<b>11,422</b>	<b>11,510</b>	<b>1,126</b>	<b>1,209</b>	<b>1,287</b>	<b>1,370</b>	<b>1,464</b>	<b>1,556</b>	<b>1,655</b>	<b>3,117</b>	<b>11,025</b>	<b>2,950</b>	<b>3,153</b>	<b>7,369</b>
<b>Total cash flow</b>	<b>52</b>	<b>59</b>	<b>36</b>	<b>1,150</b>	<b>1,108</b>	<b>1,075</b>	<b>1,041</b>	<b>1,066</b>	<b>1,082</b>	<b>1,095</b>	<b>771</b>	<b>(6,927)</b>	<b>1,361</b>	<b>1,382</b>	<b>1,152</b>
<b>Cumulative cash flow</b>	<b>52</b>	<b>111</b>	<b>147</b>	<b>1,297</b>	<b>2,405</b>	<b>3,480</b>	<b>4,521</b>	<b>5,587</b>	<b>6,669</b>	<b>7,764</b>	<b>15,703</b>	<b>8,776</b>	<b>10,137</b>	<b>11,519</b>	<b>27,850</b>

## Financial and economic cost benefit analysis

	1	2	3	4	5	6	7	8	9	10	17	18	19	20	32
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2024	2025	2026	2027	2039
<b>Financial internal rate on invested capital</b>															
Revenues	52	110	196	2,277	2,317	2,361	2,412	2,530	2,638	2,750	3,888	4,098	4,311	4,535	8,521
Residual value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,600
<b>Total revenues</b>	<b>52</b>	<b>110</b>	<b>196</b>	<b>2,277</b>	<b>2,317</b>	<b>2,361</b>	<b>2,412</b>	<b>2,530</b>	<b>2,638</b>	<b>2,750</b>	<b>3,888</b>	<b>4,098</b>	<b>4,311</b>	<b>4,535</b>	<b>17,121</b>
Total operating costs	-	51	160	1,126	1,209	1,287	1,370	1,464	1,556	1,655	2,586	2,762	2,950	3,153	7,369
Re-investment financed from internal cash flow	-	-	-	-	-	-	-	-	-	-	531	8,263	-	-	-
Interest on loans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retirement bonus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loan principal repayment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Private equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total national public contribution	2,462	2,091	2,071	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total expenditures</b>	<b>2,462</b>	<b>2,142</b>	<b>2,230</b>	<b>1,126</b>	<b>1,209</b>	<b>1,287</b>	<b>1,370</b>	<b>1,464</b>	<b>1,556</b>	<b>1,655</b>	<b>3,117</b>	<b>11,025</b>	<b>2,950</b>	<b>3,153</b>	<b>7,369</b>
<b>Net cash flow</b>	<b>(2,410)</b>	<b>(2,032)</b>	<b>(2,035)</b>	<b>1,150</b>	<b>1,108</b>	<b>1,075</b>	<b>1,041</b>	<b>1,066</b>	<b>1,082</b>	<b>1,095</b>	<b>771</b>	<b>(6,927)</b>	<b>1,361</b>	<b>1,382</b>	<b>9,752</b>
<b>Cumulative cash flow</b>	<b>(2,410)</b>	<b>(4,442)</b>	<b>(6,477)</b>	<b>(5,326)</b>	<b>(4,219)</b>	<b>(3,144)</b>	<b>(2,103)</b>	<b>(1,037)</b>	<b>45</b>	<b>1,140</b>	<b>9,080</b>	<b>2,152</b>	<b>3,513</b>	<b>4,895</b>	<b>29,827</b>
Discount rate	%	8.0%													
FNPV/K	€ 000	3,511													
FIRR/K	%	13.2%													
<b>Economic cost benefit analysis</b>															
<b>CF</b>	<b>NPV 7.0%</b>														
BOD loading HH, institutions, small business	000 kg			736	745	753	762	770	779	787	843	848	854	859	925
BOD loading large industries	000 kg			764	764	764	764	764	764	764	764	764	764	764	764
BOD loading infiltration	000 kg			39	39	39	39	46	53	60	76	77	77	78	81
Total BOD influent	000 kg			1,539	1,548	1,556	1,565	1,580	1,596	1,611	1,683	1,689	1,695	1,701	1,769
<b>Total BOD abated</b>	<b>000 kg</b>			<b>1,400</b>	<b>1,409</b>	<b>1,416</b>	<b>1,424</b>	<b>1,438</b>	<b>1,452</b>	<b>1,466</b>	<b>1,532</b>	<b>1,537</b>	<b>1,542</b>	<b>1,548</b>	<b>1,610</b>
Total BOD effluent	000 kg			139	139	140	141	142	144	145	152	152	153	153	159
<b>External benefit abated BOD</b>	<b>€ 000</b>			<b>910</b>	<b>933</b>	<b>957</b>	<b>981</b>	<b>1,011</b>	<b>1,041</b>	<b>1,072</b>	<b>1,287</b>	<b>1,317</b>	<b>1,348</b>	<b>1,380</b>	<b>1,820</b>
correction VAT on investment		362	106	155	155	-	-	-	-	-	-	-	-	-	-
<b>Fiscal corrections</b>		<b>362</b>	<b>106</b>	<b>155</b>	<b>155</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Environmental effects of BOD reduction		11,924	-	-	-	910	933	957	981	1,011	1,041	1,072	1,287	1,317	1,820
Prevention of transport costs of septic tanks		12,221	234	480	823	846	870	891	913	935	958	981	1,162	1,191	1,677
<b>External benefits</b>		<b>24,145</b>	<b>234</b>	<b>480</b>	<b>823</b>	<b>1,756</b>	<b>1,803</b>	<b>1,848</b>	<b>1,894</b>	<b>1,946</b>	<b>1,999</b>	<b>2,053</b>	<b>2,449</b>	<b>2,508</b>	<b>3,498</b>
Revenues	0.97	36,322	50	107	190	2,208	2,247	2,290	2,340	2,454	2,559	2,667	3,771	3,975	16,608
Residual value	0.97	957	-	-	-	-	-	-	-	-	-	-	-	-	8,342
Operational costs	0.97	(23,557)	-	(50)	(155)	(1,093)	(1,173)	(1,248)	(1,329)	(1,420)	(1,509)	(1,605)	(2,509)	(2,679)	(7,148)
Investments, domestic	0.97	(16,841)	(2,283)	(8,713)	(8,694)	-	-	-	-	-	-	-	-	-	-
Investments, imported	1.00	(4,137)	(108)	(2,388)	(2,388)	-	-	-	-	-	-	-	-	-	-
Reinvestment, domestic	0.97	(1,023)	-	-	-	-	-	-	-	-	-	-	(206)	(3,237)	-
Reinvestment, imported	1.00	(1,511)	-	-	-	-	-	-	-	-	-	-	(309)	(4,778)	-
correction unskilled labour during construction		2,320	369	1,169	1,169	-	-	-	-	-	-	-	-	-	-
correction unskilled labour during operations		825	-	5	15	36	39	42	46	50	53	57	89	95	233
<b>Conversion from market to economic prices</b>		<b>(6,645)</b>	<b>(1,972)</b>	<b>(9,871)</b>	<b>(9,863)</b>	<b>1,152</b>	<b>1,113</b>	<b>1,085</b>	<b>1,056</b>	<b>1,084</b>	<b>1,103</b>	<b>1,119</b>	<b>837</b>	<b>(6,625)</b>	<b>18,035</b>
<b>Total cash flow</b>		<b>17,861</b>	<b>(1,632)</b>	<b>(9,235)</b>	<b>(8,885)</b>	<b>2,907</b>	<b>2,916</b>	<b>2,932</b>	<b>2,950</b>	<b>3,029</b>	<b>3,102</b>	<b>3,173</b>	<b>3,286</b>	<b>(4,117)</b>	<b>21,532</b>
Cumulative cash flow			(1,632)	(10,867)	(19,752)	(16,844)	(13,928)	(10,996)	(8,046)	(5,016)	(1,915)	1,258	25,425	21,309	100,878
Discount rate	7.0%														
ENPV	17,861														
EIRR	14.3%														
B/C ratio	1.42														