

# **CONTENTS**

1.	THE WATER MANAGEMENT IN GREECE	1
1.1	Data collection method	1
1.2	An overview of the sector in Greece	1
1.3	The way that municipalities deal with water resources	3
1.4		
1.5	Origin of the companies which the municipalities cooperate with	5
1.6	Future needs and trends	5
2.	DESALINATION AND ANTIPOLLUTION	8
2.1	The potentiality of the sector: import, export and local production	8
2.2	Total market size and turnover	8
2.3	The problems of the sector	9
3.	LEGISLATION OR REGULATIONS / SPECIFIC STANDARDS	11
4.	INFORMATION ABOUT THE KEY PLAYERS IN THE MARKET AND	)
THE	IR CONTACT DETAILS	11
	Data collection sources	

Ep European Profiles an

1. THE WATER MANAGEMENT IN GREECE

1.1 DATA COLLECTION METHOD

Water data acquisition in Greece is not performed in a structured and organised manner. Due

to the absence of a central national water department the data acquired cannot be located in

one source. Most often the local municipalities' water companies assume this task.

Water resources monitoring is rarely applied throughout the country, thus detailed data are

not provided. The most cohesive data available regard the Attiki reservoirs, which are the

country's major reservoirs, providing potable water to almost 40% of Greece's population.

The data used in the present assessment have been collected by various sources, including

the Attiki Water Company (leading company of its kind), various university and institutes

studies, sources of the European Union, such as the European Environment Agency, the na-

tional statistical service of Greece etc.

1.2 AN OVERVIEW OF THE SECTOR IN GREECE

Greece is a country with ample water reserves, which however remain unexploited in a large

extend. Only a small fraction of about 10% of the available quantity is used for consumption,

87% of which in agriculture, largely due to the fact that many crops with relatively low water

demand have been replaced in recent years by water-intensive cultivations, e.g. cotton, citrus

fruits etc. Furthermore the water supply grid in the cities is based on antiquated technology

and is poorly maintained resulting in a great loss of water mass, the amount of which rises in

some cases to as high as 50% of the total supplied quantity. Thus the available water quanti-

ty becomes ever more inadequate for the increasing water consumption demand.

The water use distribution in various productive sectors is depicted in the following diagram.

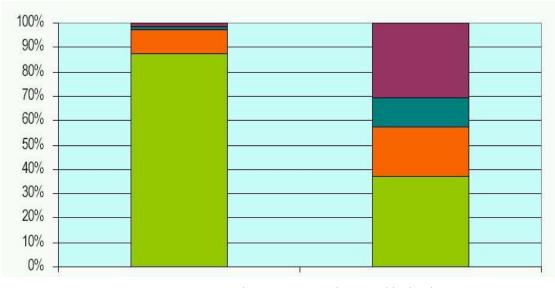
The water distribution differs significantly from the average water distribution in EU. Agricul-

tural use in Greece covers more than 80% of total demand, while the corresponding EU aver-

age is 35%.

1





Source: National environment and sustainable development center, 2003

Greece EU - 15

Agriculture Households Industry Power production

The water consumption in Greece rises constantly throughout the past 17 years. During 2004 the water demand in Attiki, where half the population of Greece is located, increased by 27 percent comparing to 1990. Since 1997 the increase ranges from 5 to 8 percent yearly. A number of particularities about Greece constitute inhibiting factors in water management and distribution. Specifically:

- A great portion of the population is located in rather arid areas like Athens.
- The tourist season, during which the population increases dramatically in a lot of areas, specifically on the islands, coincides with the dry season. The water consumption doubles during that period.
- Greece comprises numerous distant islands, where water resources are very limited and the climate is dry throughout the year.
- Uneven distribution of the water resources throughout the land and during the year.

Under these conditions and given the international effort on a European level to adopt a more consistent approach to water management Greece is striving towards the establishment of the necessary infrastructure, which will facilitate a holistic management of water resources. Currently the water management is being performed exclusively by state organisations on a municipality level, the so-called Municipal Companies of Water Supply and Sewage (greek initials: DEYA).

1.3 THE WAY THAT MUNICIPALITIES DEAL WITH WATER RESOURCES

In every municipality the management of the water resources, e.g. collection, distribution,

disinfection etc, is in the jurisdiction of the municipality's Public Company of Water Supply

and Sewage (DEYA). Each DEYA is an autonomous company with its own equipment,

pesonel, infrastructure and procedures.

The company is responsible for the water grid monitoring and maintenance as well as the

fulfillment of the billing procedure. The water cost per m<sup>3</sup> is gradual, depending on the quan-

tity consumed. The greater the quantity, the higher the cost per m<sup>3</sup> consumed. The bill is

issued in four-month periods.

In relatively arid areas with low water resources the water company decides how much water

and when is going to be provided to the grid.

Island municipalities apart from regulating the local water grid they also arrange for the wa-

ter transfer from neighboring areas and for the municipal desalination plants operation. Wa-

ter tankers (ships) are used for the water transfer. The necessary complementary infrastruc-

ture (ports, electro-mechanical equipment, pipelines, tanks) is municipal.

Currently an inter-municipal cooperation of water companies is under consideration aiming at

the creation of new infrastructure in lower cost. Furthermore, recent legislation permits the

collaboration of public with private companies to construct new infrastructure or provide stat-

utory services.

1.4 THE WAY THE ISSUE OF WATER IS DEALT WITH ON THE ISLANDS

Most of the greek islands are small in size with a relatively low geomorphology and limited

flora. Snow is absent throughout the year and the meager rainwater escapes to the sea and

into the shallow aguifers. This results to very limited water resources and finite capabilities

for exploitation of the existing water sources. Furthermore the local economy is based in a

large extend on tourism and agriculture, both of which demand large quantities of water dur-

ing the dry period. The problem is less severe to the west of the country, where rainfall is

more frequent and intense in contrast to the southern and central eastern islands, where

rainfall is scarce. The average available water quantity<sup>1</sup> for the island population is 2478m<sup>3</sup>

per person per year, which corresponds to approximately 70 lt/p/d.

<sup>1</sup> Ministry of the Aegean

3



The islands with the most intense water resource problem are those of Dodecanese and Cyclades. Rhodes and Kos from the first region as well as Andros and Naxos from the second have ample water resources and can afford to distribute potable water to the nearby smaller islands. In the northern Aegean as well as the Ionian region water sources suffice in most of the islands.

The island water supply alternatives include water bores, floating water carriers, small natural and artificial reservoirs, private individual rainwater tanks and desalination plants, of which the first two are the most important for small islands. The consumption of bottled water is also widespread among the local inhabitants.

The main water source for small islands is the mainland, from where fresh water is transferred with water carriers, pumped in large municipal tanks and fed to the island water supply grid. In many islands two or more routes per day are necessary during winter and even more during the tourist season, when water demand reaches the peak while water availability is minimal. The total potable water quantity transferred in the area of central and southern Aegean until 2000 was approximately 2,500,000 m<sup>3</sup>/y. In the following table the transferred water quantities to a number of Aegean islands for the years 1997 – 2001 are presented.

Table 1: Transferred potable water quantity in m<sup>3</sup>

Island / Year	1997	1998	1999	2000	2001	<b>%</b> (1997²-2001)
Tinos				37531	35817	-4.6%
Koufonisi	23355	28620	26320	29351	31158	33.4%
Patmos	86420	106178	129597	16 <del>4</del> 366	165859	91.9%
Agathonisi	3030	5302	7288	8840	9838	224.7%
Lipsi	26500	32088	27124	35986	42946	62.1%
Simi	177650	201512	153762	175639	119519	-32.7%
Amorgos	20350	21130	24670	13570	19150	-5.9%
Sikinos				10000	14550	45.5%
Milos					47658	1
Folegandros	6890	5580	10170	12730	16520	139.8%
Nisiros	40035	44778	52394	80108	78360	95.7%
Kimolos	14170	17990	16375	24538	30133	112.7%
Thirasia					8250	-
Iraklia	5190	6630	77 <del>4</del> 5	9100	12140	133.9%
Shinousa	8055	12175	3430	11640	14200	76.3%
Chalki		56654	47283	42937	38177	-32.6%
Megisti	24851	36856	42737	46168	41968	68.9%

Source: Water company of Attiki

<sup>&</sup>lt;sup>2</sup> Where data for 1997 is not available the earliest available is used instead.

Ep European Profiles an

Desalination is considered an alternative for water production on the islands. The past decade various applications have been brought into effect. These range from small private installations to large municipal plants. The later are located on at least 17 islands of the country and their capacity ranges from 300 to 3000  $m^3/d$ .

Of great interest is the recent deployment of a floating desalination plant prototype constructed by a consortium of greek enterprises, institutes and the university of the Aegean. This is the first plant of its kind worldwide. The pilot two-month operation is due on February 2007. The necessary power for the operation of the plant is supplied by a wind turbine and additionally by photovoltaic panels. The system is autonomous and can be operated remotely via Internet connection. The technology used for desalination is reverse osmosis and it provides an output of 70-80m³/d. The estimated market cost for the system, once in production phase, is approximately 700.000€.

The water cost on the islands ranges from  $1.5 - 4 \in$  per m<sup>3</sup>, which is relatively expensive compared to the mainland pricing of  $0.5 - 1.5 \in$  per m<sup>3</sup>. This can be attributed to the high water transfer cost of near  $7.5 \in$ /m<sup>3</sup>, which however is subsidised by the state.

## 1.5 Origin of the companies which the municipalities cooperate with

The most companies Municipalities cooperate with are of greek origin. This concerns the preparation of assessments as well as the construction of new and the maintenance of existing infrastructure. Municipalities also cooperate with greek universities on assessment and research subjects.

Other countries from which the cooperating companies stem include the United States (e.g. Kulligan), France (Vivendi Water) and Germany (Judo).

#### 1.6 FUTURE NEEDS AND TRENDS

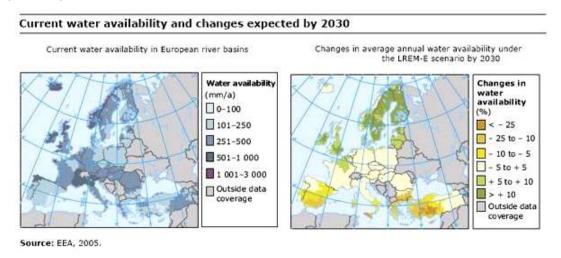
The drinking water in Greece is approximately 10% of the total water consumption. About 87% of the available quantity is used for irrigation. According to estimations<sup>3</sup> almost 60% of the total water supplies of the country is attributed to precipitation. Yet during the past 50 years the precipitation is being diminished with a rate near 3% yearly. A combination of reduced rainfall and increased evaporation is likely to cause a reduction by 2030 of 10% or more in the run-off in many river basins<sup>4</sup>. What's more official reports state that the forth-coming decades 84% of the country is threatened or seriously threatened by desertification.

<sup>&</sup>lt;sup>3</sup> Hellenic society for the protection of nature

<sup>4</sup> http://epaedia.eea.europa.eu/page.php?pid=502



The following diagram<sup>5</sup> depicts the current water availability in Europe and the changes expected by 2030.



Current water availability and changes expected by 2030

Source: European Environment Agency

6

The main source of water is the surface water, e.g. lakes and rivers, contributing near 85-90% of the total available quantity. On the other hand the precipitation, due to climate changes, tends to be more concentrated and more intense, which leads to vast run-off. Therefore it is widely recognized that reservoir construction is of prime importance in the near future.

Aquifer water abstraction has greatly increased the past twenty years, covering by 2003 approximately 40% of the country's total water demand. Groundwater over-abstraction is leading rapidly to the drainage of the aquifers. The current year the aquifer level is 2-10m lower than 2006. In a 100 km² region of Attica, over 3000 water bores reaching to as deep as 300m below the surface of the earth have caused saltwater intrusion.

The following table summarizes the water consumption in Attica, where approximately 35-40% of the country's population resides, during the years 1990-2004.

Table 2: Water consumption in Attica, 1990-2004

Year	Consumption (mil. m³)
1990	320,000
1991	340,000
1992	265,000
1993	250,000
1994	280,000

<sup>&</sup>lt;sup>5</sup> European Environment Agency



Year	Consumption (mil. m³)
1995	310,000
1996	307,432
1997	319,427
1998	339,675
1999	357,003
2000	385,856
2001	400,558
2002	416,080
2003	399,220
2004	405,435

Source: Sewer and Water Company of Attiki

The above quantities refer to the refineries output including therefore the grid loss. Total consumption was approximately 27% higher in 2004 in relation to 1990 and 63% in relation to 1993. During that year a considerable effort was made to reduce home water consumption, in order to deal with a high drop of water availability due to an extensive drought. During 1997 the water consumption reached the levels of 1991 and kept rising since with a pace of 5-8% yearly, which roughly applies for the rest of the country as well. According to predictions should this rate of increase sustain, the available water sources for Attica will become insufficient by 2030.

Today approximately 90% of urban households are connected to piped water. The average available water quantity in mainland is approximately 6000m<sup>3</sup> per person per year<sup>6</sup>, which in urban areas corresponds to about 165 lt/p/d. For the islands it slides down to 2478m<sup>3</sup> per person per year, which corresponds to approximately 70 lt/p/d.

The greater urban water demand is located in Attica, where the grid losses correspond to about 10-40% of the total water transferred.

Desalination plants are considered a third-level alternative, following low consumption practices and reservoirs construction, the main inhibiting factor for their utilization being their excessive energy consumption.

Their main application is on small, distant islands of low and flat geomorphology. According to estimations by the Ministry of Development in 2001 the Public Power Company's (PPC's) island power stations could utilise the waste heat, which sums up to about 50% of the energy produced, to power up desalination plants. The estimated potential ranges from 10 to 30.000

<sup>&</sup>lt;sup>6</sup> Athens water and sewage company, March 2006

EP European Profiles aa

m<sup>3</sup>/d. The examined scenarios predict the participation of private companies that will finance the investments and manage the plants. Until today this plan has not yet come into effect.

Concerning agriculture, between 1992 and 2002 water abstraction for agricultural use was reduced by about 2.5 %. It is estimated that over the next years, further reductions will be achieved. These will arise from the implementation of new CAP and EU regulations, modernisation and renovation of irrigation networks, application of new technologies for irrigation, and the training of farmers in good agricultural practices<sup>7</sup>.

In relation to the water costs in the 1990s there had been a general trend towards higher water prices, which during 1990-1995 reached approximately 2.2%. In late 90s the household water cost was approximately  $1.2 \in /m^3$ , while at the same time the agricultural water cost was  $0.1 \in /m^3$ . The current household water cost ranges from  $0.5 - 1.5 \in /m^3$  in the mainland and from  $1 - 4 \in /m^3$  on the islands.

## 2. DESALINATION AND ANTIPOLLUTION

## 2.1 THE POTENTIALITY OF THE SECTOR: IMPORT, EXPORT AND LOCAL PRODUCTION

Most of the enterprises of the sector are small-scale and the overwhelming majority are retailers. Very few enterprises actually produce desalination and antipollution systems. Data collection concerning this field was not possible because of the following reasons:

- The greek coding system of the trade sector is inadequate as far as it concerns this technology. No specific code has been assigned to the relative activities and therefore the enterprises of the sector are practically untraceable (e.g. antipollution refers to all the activities of the sector, not separating the sub-activities)
- Almost the total of the enterprises of the sector are occupied with a multitude of relative
  activities and products (pipelines, electromechanical equipment etc) rendering the tracing
  of the specific products very difficult.
- Few branch assessments are available, which nevertheless are not ad hoc assessments.

#### 2.2 TOTAL MARKET SIZE AND TURNOVER

The overwhelming majority of enterprises in the water sector is enterprises that import and trade equipment rather than produce it. The available data concern that kind of enterprises. An inherent weakness of the greek trade sector classification system, concerning the water desalination and antipollution sector, is that no specific code has been assigned to those sec-

<sup>&</sup>lt;sup>7</sup> "The European environment – state and outlook 2005", European Environment Agency



tors. As a consequence the available data sum up enterprises of the wider sector and therefore they should not be regarded in terms of absolute values, but rather as percentage.

The sector that includes water *desalination* is entitled "Water collection, refining and distribution", while water *antipollution* is classified under the sector entitled "Purification, hygiene and similar activities".

Table 3: Total number of greek water desalination and antipollution enterprises divided in turnover categories

	Sectors divided in turnover categories (€ mil.)											
Code	Sector	Total No of Enterprises	Annual Turno- ver (in mln	[0-0,15]	[0,15-0,3]	[0,3-0,5]	[0,5-1,5]	[1,5-5]	[5-15]	[15-50]	[50-100]	[100-+]
4100	Water collec- tion, refining and distribution	514	510,4	414	19	17	38	16	7	1	0	1
9003	Purification, hygiene and similar activities	85	4,95	82	1	0	1	1	0	0	0	0

Source: National statistical service of Greece (2002).

## 2.3 THE PROBLEMS OF THE SECTOR

The problems of the water sector in Greece are manifold and they require a holistic approach to be surmounted.

The legal framework under which the cooperation of public and private companies occurs is not yet mature. The inflexible administrative and legislative framework within which private investors are forced to operate is the basic inhibiting factor.

Specifically concerning the installation of desalination plans the procedure is rather bureaucratic requiring the acquisition of many permits before the actual installation process commences.

A problem of different nature of the desalination plants concerns the power consumption. The plants are usually installed on small islands, where the available power is not sufficient to cover the increased demands. Therefore other alternatives are examined, such as desalination in combination with renewable energy sources.

Regarding the installation of antipollution systems no such problems occur.



Other more general problems concern:

1. Organisational weaknesses. With the present organisational structure water management and monitoring are under the administrative district of many different authorities. From this ensues confusion and inactivity, which render the rest of the sector's problems even more acute. A striking example is offered by the uncontrolled, unauthorised and very often illegal water bores drilled by landowners on islands in order to pump irrigation water. This has led to aquifer salination and thus shortage of potable water for the local population.

2. Water supply grid. In many province areas the water supply grid is poorly maintained and built on antiquated technology. This results to great mass loss, which in cases reaches 50%. Often the grid pipelines are old and rusty, resulting to diminished water quality and driving the population to manually collect water from local springs or desalination plants using containers.

3. Offer and demand inconsistency. Tourism and agriculture are two factors, which greatly affect water demand especially during the arid period. Moreover rainfall in Greece is not uniformly distributed throughout the land thus resulting partly in water redundancy in some areas and drought in others. This also applies to time distribution

**4. Nature of the island surface.** Meager land availability and flat geomorphology on the islands do not allow the construction of large reservoirs for the exploitation of the precipitation.

**5. Antiquated irrigation technology**. The inefficient irrigation systems used in agriculture consume vast quantities of water, which would otherwise be available for home consumption.

**6. Surface and underground water pollution**. Industry and agriculture consume large water quantities while at the same time diminish the water quality by polluting surface and underground water. Fertilizers, pesticides, industrial wastewater and waste chemicals are the main pollutants responsible for water quality degradation.

7. Cost of desalination plants. Limited desalination plants have been installed comparing to the water supply needs. This is of great concern especially to the insular part of Greece. One of the main inhibiting factors is beyond doubt the high cost of such installations.



## 3. LEGISLATION OR REGULATIONS / SPECIFIC STANDARDS

The legislation currently in effect in a European level concerning water management is the 2000/60/EU directive. This has been attuned to the current greek statutory framework with the application of L 3199/2003 (FEK A 280/9.12.2003) under the title *Water protection and management in accordance with the 2000/60/EU Directive.* Its main prints are:

**a/** The establishment of a new water management organisational structure (National Water Committee, Central Water Department, Prefecture Water Administration, Prefecture Water Council), **b/** the description of the management plan, **c/** water monitoring and protection rules, **d/** antipollution measures plan **e/** water use and exploitation permits and **f/** water rate policy.

# 4. INFORMATION ABOUT THE KEY PLAYERS IN THE MARKET AND THEIR CONTACT DETAILS

## 4.1 DATA COLLECTION SOURCES

The difficulty in retrieving the desired information lays in the fact that no central service exists for the acquisition and process of such data. Therefore various sources were utilised in order to acquire and confirm the desired information. The sources were the following:

- Athens Chamber of Commerce and Industry
- National Statistical Service of Greece
- Journals and web portals of the branch
- Personal phone contact with all of the companies.

The following tables summarize the acquired information. Where information was irretrievable or not available the corresponding fields are left blank.



# **ANNEX:** Greek companies of the sector

COMPANY'S NAME	PROFILE	TEL	FAX	ADDRESS	EMAIL	WEB SITE	Mr/ Ms	CONTACT*	TURNOVER
	water filtration, water softener units, dealkalization units, deionization			Neo Risio 22441					
AQUA TECH LTD	units, reverse osmosis units, chlorination units, ozone generators	+302392072334	+302392072335	Kalamaria 551 02					
	ana, retere estresis ana, enemaler ana, ezere generaters			Thessaloniki					
		+302104014480							
		+302104014481							
ACQUATHIN HELLAS N.	water filtration, water softener units, dealkalization units, deionization	+302104014482	+302109732130	Kekropos 13, Ili-			Mr	Zografos	
KAMTSIOU - P. KIROS	units, reverse osmosis units, chlorination units	+302104014483		opoli Athens					
		+302104014484							
		+302104014485							
ADTEC - CHEMICALS	water filtration, water softener units, dealkalization units, deionization	+302105312262	+302105317495		adtec@hol.gr		Mr	Mpasiakos	
ADTEC - CHEMICALS	units, reverse osmosis units, chlorination units	+302105317495	1302103317433		<u>aatee@noi.gr</u>		1711	Празнакоз	
	water filtration, water softener units, dealkalization units, deionization	+302105593416							
ADVICE LTD	units, reverse osmosis units, chlorination units, UV sterilizers, ozone	+302103393416	+302105593417		info@adviceltd.gr	www.adviceltd.gr			
AB 1102 213	generators	+302103424477							
AQUACHEM LTD	reverse osmosis units, UV sterilizers, ozone generators	+302310458223	+302310456657		aquachem@otenet.gr		Mr	Patronas	
		. 202405772444	. 202405772440	Ag. Lavras 24, 141					
AQUA CENTER TREATMENT	UV sterilizers, ozone generators	+302105773441-2	+302105773440	21 N. Liossia					
AQUA CENTER	water softener units, UV sterilizers	+302102407961-2	+302102407960	Ag. Triados 113,	info@aqua-center.gr				2.212.347,42(2005)
AQUA CENTER	water sortener units, ov sternizers	+302102407961-2	+302102407960	136 71 Acharnai	inowaqua-center.gr				2.212.347,42(2005)
ALFA POOLS PA-	water filtration, dealkalization units, deionization units, deionization			Pindou & Metamor-				Pa-	
PAEYSTATHIOU ALEX.	units, reverse osmosis units, chlorination units, ozone generators	+302104832566	+302104832837	foseos 47, 183 45			Mr	paefstathiou	
TAETOTATITOO AEEA.	unital, reverse osmosis unital, emornidatori unital, ozone generators			Moschato				pacistatilloa	
				Akakion 35-37		www.otenet.gr/bamarhell			
BAMAR HELLAS LTD	UV sterilizers	+302106843209	+302106843209	Polidroso Amarou-	badep@otenet.gr	as	Mr	Palli	
				siou		us us			
	water filtration, dealkalization units, deionization units, deionization			Mitropoleos 6 546					
BIOCHEM LTD	units, reverse osmosis units, chlorination units, ozone generators	+302310537814	+302310546635	28 Thessaloniki			Mr	Arvanitidis	
	,								

EUROPEAN PROFILES SA 40, Vatatzi str, GR 11472 Athens





COMPANY'S NAME	PROFILE	TEL	FAX	ADDRESS	EMAIL	WEB SITE	Mr/ Ms	CONTACT*	TURNOVER
CHEMITEC - CHR. LIOUMIS	water filtration, dealkalization units, deionization units, deionization units, reverse osmosis units, chlorination units, ozone generators	+302105316515	+302105984614		chemtec@tee.gr	www.chemitec.gr			
DELTA - CO AGENCIES N. & K. DROSOS	water filtration, water softener units, reverse osmosis units, UV steri- lizers, ozone generators	+302102926335 +302102137150	+302102911767	El. Venizelou 25 & Iras 30 111 47 Galatsi	deltaco@tee.gr		Mr	Drosos	
ECO WATERS SYSTEMS	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units	+302103112623		Anikseos 50, Panorama Thessaloniki					
ETECO - D. MPELLOS	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units, UV sterilizers, ozone generators	+302310797455	+302310540325	Viomichaniki Perioxi Sindos bulding 33 570 22 Thessaloniki	eteco@acisgroup.gr		Mr	Mpellos	
EUROMARKET	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units, UV sterilizers	+302107245642	+302107242165	Efroniou 50 161	euromark@acci.gr		Mr	Kotsis	2.927.088,47(2004)
EUROTECO G. NATSIKAS	water filtration, reverse osmosis units, UV sterilizers, ozone generators	+302106990821	+302106998693	Sevastoupoleos 49, 115 24 Athens	euroteco@otenet.gr		Mr	Natsikas	
EXPO MODERN & ELEC- TRICAL EQUIPMENT	water filtration, water softener units, dealkalization units, deionization units, chlorination units	+302107485560	+302107706342	Nimfaiou 20-24, Patissia Athens	info@expo.gr	www.expo.gr	Mr	Stamatiadis	3.662.716,16(2004)
FILDERDYN VASSILEIOU B.	water filtration, water softener units, deionization units	+302102114004		Peresiadou 7, Patissia Athens			Mr	Vassileiou	
FLEX CO	UV sterilizers, ozone generators	+302310923988	+302310328887	Profiti Ilia 20, Pilaia Thessaloniki	dermoflex@otenet.gr	www.dermoflex.gr			
INTERACQUA THEO- CHAROPOULOS STATHO- POULOS CHATZIMINAS	water softener units, dealkalization units	+302109707164	+302109733643	Ag. Vassileiou 83 173 43 Ag. Dimitri- os	interacqua@mland.gr		Mr	Theo- charopoulos	
KSB - TESMA SA INDUSTRY PUMPS	water filtration, reverse osmosis units	+302106108071-8	+302106108079 +302106108080	Romanou Melodou 3, 151 25 Marousi Athens	ksbtesma@acci.gr	www.ksbtesma.gr			
MARINCO MPANTOURAKIS	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units	+302105692520	+302105441330	Grigoriou Lampraki Pireas Athens			Mr	Mpantoura- kis	





COMPANY'S NAME	PROFILE	TEL	FAX	ADDRESS	EMAIL	WEB SITE	Mr/ Ms	CONTACT*	TURNOVER
	water filtration, water softener units, dealkalization units, deionization			Leoforos Kenedy 2,	nero-				
NEROTECH LTD	units	+3572312136	+3572491016	Akropolis 1087	tech@logimentrics.co				
				Leukosia Cyprus	<u>m</u>				
				12th km of Thessa-					
NOCCHI PUMPS HELLAS	water filtration, water softener units	+302310476277	+32310476177	loniki-Moudanies			Mr	Pourganis	
LTD				20054, Thermi Thessaloniki					
N.W.W.A. AQUATECH-	water filtration, water softener units, dealkalization units, deionization	+30221073910		THESSAIOTIKI					
NOLOGIES GEORGE N.	units, reverse osmosis units, chlorination units, UV sterilizers, ozone	+30221073930	+30221073920	Favierou 21 341 00	nwwwa@mail.com	www.water4you.com	Mr	Papaniko-	
PAPANIKOLAOU	generators	+30221077183	+30221077183	Chalkida	- Inwa Girian Com	www.water ryourcom	'''	laou	
	J			Ch. Galanou 2 552					
OLAS INTERNATIONAL	chlorination units	+302310343414	+302310344583	36 Panorama	ola@hol.gr		Mr	Folia	
FOLIA EDOUMAS LTD				Thessaloniki					
	water filtration, water softener units, dealkalization units, deionization	+302104131721		G. Lambraki 6-8					
OSMO VITALI	units, reverse osmosis units, chlorination units, UV sterilizers, ozone	+302104179572	+302104111462	185 32 Pireas	vitalis@ath.forthnet.gr	www.osmo.united-	Mr	Vitallis	
	generators	+302104224652		Athens		<u>hellas.com</u>			
	water filtration, water softener units, dealkalization units, deionization			28 Octomyriou 32					
SHIELCO CHEMICALS	units, reverse osmosis units, chlorination units, UV sterilizers, ozone	+302106122264	+302108026515	A 151 21 Peuki	shielco@acci.gr		Mrs	Nakou	
	generators			A 131 21 T COR					
	water filtration, water softener units, dealkalization units, deionization			Imvrou 24, 104 40					
STELNIC	units, reverse osmosis units, chlorination units, UV sterilizers, ozone	+302108623084	+302108655829	Athens	stelnic@tee.gr		Mr	Gavriloglou	
	generators								
UNIVERSAL IMPORTEX	water filtration, water softener units, dealkalization units, deionization	+302106011518	+302106010493	Mesogeion 421A			Mr	Gergiadis	
	units, reverse osmosis units, chlorination units			Agia Paraskeui				<u> </u>	
		+302102520988		Gaitanaki 18 Filap-					
AERO-DYNAMIKI LTD	water filtration, water softener units, dealkalization units, deionization	+302102520065	+302102526207	helfia 143 42,	www.aerodynamic.gr	sales@aerodynamic.gr			
7.2.1.0 2 7.1.1.1.1.1.2 2.1.2	units, reverse osmosis units, chlorination units, UV sterilizers	+302102582771		Athens		_			
		+302102582772		Ellamatan 7.0					
GENEM	water softener units,reverse osmosis units,chlorination units	+302109574072		Filaretou 7 &					
				Doiranis Kallithea					





COMPANY'S NAME	PROFILE	TEL	FAX	ADDRESS	EMAIL	WEB SITE	Mr/ Ms	CONTACT*	TURNOVER
ARGYROS PETROS	water filtration, water softener units,reverse osmosis units,chlorination units	+302108000232	+302108000919	Venizelou 111, N. Erithraia Athens			Mr	Argyros	
IDANIKES LYSEIS	chlorination units, pool construction	+302106148400	+302106142308	Davaki 18, Peuki 151 21 Athens	inf@piscinesideals.co <u>m</u>	www.piscinesideales.com	Mr	Charalam- poloulos	4.879.229,97(2005)
INTERNAFTIKI LTD	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units	+302104126997 +302104128393	+302104127566	Olimbias 5 & Voul- gari 94, 185 34 Pireas Athens					1.094.307,19(2005)
KANER LTD	chlorination units	+302102430726		Selefkou 12 A Acharnai			Mr	Vouraimis	
KARKANIAS ENVIRON- MENTAL TECHNOLOGY	water filtration, water softener units, chlorination units	+302410541386	+302410541354	Viomichaniki Perioxi Larissa 1607 410 02 Volos	karkania@otenet.gr		Mr	Karkanias	1.811.967,40(2005)
KATRANIDIS NIK.	water filtration, water softener units,reverse osmosis units, chlorination units	+302103225235		Ermou 106 Athens			Mr	Katranidis	
KATRANZIS E. NIK.	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units, UV sterilizers	+302104325643 +302104329154	+302104317185	Viliara 11-13 187 57 Amfiali-Pireas			Mr	Katranzis	
KESKINIDIS ATHAN.	water filtration, water softener units,reverse osmosis units,chlorination units	+302107241660		Vassiliou Georgiou B 42, Pagrati			Mr	Keskinidis	
MPALLIS ERGA PROSTA- SIAS PERIVALLONTOS	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units, UV sterilizers, ozone generators	+302310796052	+302310795771	Viomichaniki Perio- chi Sindou Building 1, 18	ballisan@spark.net.gr		Mr	Mpallis	
NEA TECHNIKI LTD PA- PADIMITRIOU- FOUNTAKOS	water filtration, reverse osmosis units, UV sterilizers, ozone generators	+302107567745-7	+302107567748	Artotinis 2 & Imitou 116 33 Pagrati Athens	found@aias.gr		Mr	Papadimitrio u	
OIKOTHERM	water filtration, water softener units	+302102524038 +302102522674	+302102523506	Grigoriou Lambraki 40 143 42 N. Filadelthia	ikotherm@otenet.gr		Mr	Trifiatis	
OIKOLOGIKI ATH. PSILLOS	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units, UV sterilizers, ozone generators	+302310604504	+302310918118	L. Stratou 93 564 29 Plichni Thessa- Ioniki	ecologi- cal@sparknet.gr		Mr	Psillos	





COMPANY'S NAME	PROFILE	TEL	FAX	ADDRESS	EMAIL	WEB SITE	Mr/ Ms	CONTACT*	TURNOVER
PAPAFRAGOS IOANNIS LTD	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units	+302102811539 +302102811857	+302102845315	12th km of National Road Athens - Lamia	papgas@internet.gr		Mr	Papagrafos	
PERIVALLONTIKI LTD MPOULIOS - KIRIAZIS	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units	+302310438812	+302310438834	Paraskevopoulou 45 55133 Kala- maria Thessaloniki			Mr	Mpoulios	
TEFIL INTERNATIONAL COMMERCIAL	water filtration, water softener units, reverse osmosis units	+302106902500	+302106902599	L. Riankour 75, 115 23 Athens	tefil@tefil.gr, every- one@tefil.gr				
TEXNE	water filtration, water softener units, dealkalization units, deionization units, reverse osmosis units, chlorination units, UV sterilizers, ozone generators	+302106423815 +302106445266	+302106430871	Kalliga & Sirianou 210 02 Gizi 114 10 Athens	texne@otenet.gr		Mr	Fissas	
TECHNOLOGIES PERIVAL- LONTOS	reverse osmosis units	+302310318712	+302310318611	Mitropolitou Kalidou 122, Kalamaria Thessaloniki			Mr	Papazopou- los	
TECHNOLOGIES PERIVAL- LONTOS G. MPOUMPOU- KAS	water filtration, water softener units, dealkalization units, reverse osmosis units, UV sterilizers	+302102918152 +302102918135	+302102918135	Iras 30 & El. Venizelou 25 111 74 Galatsi	texnop@otenet.gr		Mr	Mpoumpou- kas	
HYDROBIOLOGIKI TH. ANDREADIS LTD	water filtration, water softener units, deionization units, chlorination units	+302310318712	+302310318611	Pr. Ilia 36, Pilaia 555 35 Thessaloniki			Mr	Andreadis	
HYDROELECTRIKI OE E. GIANNAKOPOULOS - IOAN. TOYRNAVITIS	water filtration, water softener units, chlorination units	+302443022997 +302443023230 +302443022569	+302443022466	Sofades Karditsa			Mr	Giannakopo ulos	
FILPRO ANTHOPOULOS	water filtration, water softener units, deionization units	+302104811064 +302104814019	+302104812688	Perikleos 6 & Niko- laidi 17, 182 33 Ag. I. Rentis Peiraias			Mr	Anthopoulos	
AIRWATER HELLAS	Potable water production from air	+302392092211	+302392092030	K Scholari str., 57500, Thessaloniki	info@klimatec- airpro.com	<u>www.airwater.gr</u>	Mr	Michailidis	
AQUAFRESH HELLAS	RO Desalination, filtering, countertop water cooler, floor water cooler	+302310636733	+302310634451	16 Ippokratous St, 566 25, Sykies, Thessaloniki	info@aquafresh- hellas.gr	www.aquafresh-hellas.gr			





COMPANY'S NAME	PROFILE	TEL	FAX	ADDRESS	EMAIL	WEB SITE	Mr/ Ms	CONTACT*	TURNOVER
ASTRAPOOL HELLAS	Water treatment equipment	+302105594527	+302105596454	10 Thesi Katsari, Aspropirgos, 19300, Athina	info@astrapool.gr		Mr	Papasavvas	
AVANTIS TECHNOLOGIES S.A.	Water treatment systems	+302221062840	+302221062841	21 Varatasi & Ioustinianou, 34100, Chalkida	info@avantis.gr	www.avantis.gr			
AVLIS AEVE	Ion Exchange Resins, Absorbents, Reverse Osmosis Membranes, Ultra and Nanofiltration Membranes and Granulated Activated Carbon (GAC)	+302103461095	+302103479791	14 Reas str., 11853, Athens	<u>avlis-</u> main@avlis.com.gr	www.avlis.com.gr	Mr	Bouzelas	2.842.718(2004)
CULLIGAN	Industrial/SME/home water installations, pools, water waste treatment plants, water softeners	+302103413444	+302103413050	79 Iera Odos str., 11855, Athens	culligan@culligan.gr	www.culligan.gr	Mr	Risakis	1.682.443(2004)
ECOFILTER SYSTEMS INT'L	RO Systems, applications, filtration, pumps	+302310530830		13 D. Komninwn str., Neapoli, 56727, Thessaloniki		www.ecofilter.gr	Mr	Kotanidis	
ECOLOGIKI S.A.	Biological wastewater treatment, blowers, dispersers, pumps  Desalination, softeners, water recycling	+302310905655	+302310918118	19 Venizelou (N. Eukarpia), 56429, Thessaloniki	oikolo@hol.gr	www.ecologiki.gr	Mr	Moschou	
FERI TRI AVEE	Water treatment chemical products	+302310799333	+302310797488	Industrial area of Thessaloniki, Block 42, Sindos, Thessa- Ioniki			Mr	Bouzelas	1.711.671(2004)
FILTER TECH	Water filters in industrial applications	+302310533504	+302310540341	26 Kolleti str., Dimokratias sq, 54627, Thessaloniki	info@filtertech.gr	www.filtertech.gr	Mr	Yiorgos Chalikias	
FILTERDYN	Industrial filters, water treatment: RO, desalination, sterilization, softeners	+302102231714	+302102017699	7 Peresiadou str, 11141, Athens	info@filterdyn.gr	www.filterdyn.gr	Mr	Vassileiou	
HYDROELECTRICA E. GIANNAKOPOULOS - I. TOURNAVITIS CO.	Manufacturer	+302443023230	+302443022466	102 Plastira st, Sofades, 43300, Karditsa	hydroele@tee.gr	www.hydroelectrica.com	Mr	Gianna- kopoulos	
IONEL S.A.	Water treatment equipment	+302102779911	+302102779914	5 Kastamonis st, Irakleio,			Mr	Antiochos	605.875(2004)

EUROPEAN PROFILES SA 40, Vatatzi str, GR 11472 Athens





COMPANY'S NAME	PROFILE	TEL	FAX	ADDRESS	EMAIL	WEB SITE	Mr/ Ms	CONTACT*	TURNOVER
JUDO HELLAS	Water desalination, filters, water softeners, industrial and warm water filters, home filters	+302310513280	+302310513280	80 Monastiriou st, Dimokratias sq, 54627, Thessaloniki	info@filtercosmos.gr	www.judohellas.gr	Mr	Nikolaidis Konstantinos	
MICHOS S.A.	Potable water refineries equipment	+302106774280	+302106775533	28 Dimokratias av, N. Psychiko, 15451, Athens	info@michos.gr	www.michos.gr	Mr	Michos	1.668.571(2004)
N. SAPOUNTZIS S.A.	Industrial/Home water treatment systems, wastewater treatment	+302102712908	+302102715608	86 Kapodistriou & Roumelis st, N. Ionia, 14235, Athens	nsa- pountzis@ath.forthnet .gr	www.nsap.qr	Mr	Sapountzis	
PRODACHEM	Water sterilization, desalination, softening, pool water treatment, waste water treatment, water treatment equipment	+302103455491	+302103473797	31 Parodos Dimitros st, Tavros, 17778, Athens	info@prodachem.gr	www.prodachem.gr			1.758.202(2004)
PROMINENT HELLAS	Reverse osmosis systems, ozone generating systems	+302105134621	+302105134500	24 Mitrdodorou st, Kolonos, 10441, Athens	promin@hol.gr		Mr	Sakellariou	979.627(2004)
SYCHEM	Desalination, laboratory water analysis, water treatment chemicals	+302106084940	+302106084942	518 Mesogeion av, Agia Paraskevi, 15342, Athens	info@sychem.gr	www.sychem.gr	Mr	Siriopoulos	
TECHNICAL S.A.	Chlorination, ionization, ozone systems	+302108073802	+302108073206	1 Xadjimichali st, Kifisia, 14564, Athens	info@technicalsa.com	www.technicalsa.com	Mr	Poligerinos	3.478.496(2004)
TECHNOCHIMIKI KRITIS S.A.	Biological wastewater treatment equipment, pools, chemicals	+302810381077	+302810380537	M str, Building No 5, Iraklion Industri- al area, 71601, Crete					
TEMAK S.A.	Assessment, planning, manufacturing, installation, support in water treatment equipment	+302102581583	+302102533989	Tsounta 74 & K.Palama 34, T.K. 143 43 N.Halkidona, ATHE NS	info@temak.gr	www.temak.gr	Mr	Mitsopoulos	4.054.495(2004)



## Water technology and resources in Greece

COMPANY'S NAME	PROFILE	TEL	FAX	ADDRESS	EMAIL	WEB SITE	Mr/ Ms	CONTACT*	TURNOVER
UNIVERSAL AQUA PLUS	Water sterilization, filtering, desalination, softeners, spa	+302106611123	+302106615959	36 Miaouli st, Ierakas, 15344, Athens	info@aquaplus.gr	www.aquaplus.gr	Mr	Georgiadis	
WATER FILTERABLE LTD	Water filtering equipment and installation	+302102441561	+302102406949	Kimis av, Thesi Monomati, Aharne, 13673, Athens	info@water.com.gr	water.com.gr	Mrs	Barbouni	

\*Note: Where Contact name was not provided the respective table cell was left blank