Sustainability Report 2019



Chairman's Message	5
CEO's Message	6
Deputy CEO's Message	7
About the Report	8
Striking Points	10
Major Events	14
EYDAP Actions to Achieve	
Sustainable Development	
Targets	16

1		2		3	
About		Custoinable		Creating Value	
About EYDAP	19	Sustainable Development Strategy	53	Creating Value for the Market	
1.1 Profile of EYDAP	20	2.1 Dialogue with Stakeholders	53 54	3.1 Access to Clean Water,	
1.2 Corporate Governance	38	2.2 Materiality Analysis	56	Sustainability of Water Resources	
1.3 Value Chain	44	272 Tatestiancy Analysis		& Water Supply Coverage	
1.4 Supply Chain	46			3.2 Reliable Network	7
1.5 Participations and Recognitions	50			& Water Efficiency	
				3.3 Health & Safety of Consumers:  Drinking Water Quality	8
				3.4 Health & Safety of Consumers:	9
				EYDAP Sewerage Services	
				3.5 Affordable Pricing-	11
				Customer Service	
				3.6 Fighting against Corruption	12

## Contents

4					
4					
Creating Value		Creating Value		Creating Value	
for the Environment	135	for our Employees	159	for the Society	183
4.1 Marine Environment Protection	136	5.1 Employment	160	6.1 Environmental Awareness	184
(Effluent Treatment)		5.2 Health & Safety of Employees	168	6.2 Actions of Social Solidarity &	190
4.2 Environmental Compliance	140	5.3 Training and Education	176	Preservation of Cultural Heritage	
4.3 Biodiversity Protection	143	5.4 Human Rights in Workplace	179		
4.4 Solid Waste Management	146				
(Circular Economy)					
4.5 Energy Efficiency	155				



GRI 102-14

## Chairman's Message



#### Ladies and Gentlemen, Dear Friends,

While the challenges at the international level regarding the management of the environment and in particular of water resources are becoming greater, I think that for the first time we have reason to be optimistic that we will soon be able to achieve local and international economic growth without the need to increase the consumption of water and environmental resources. Advances in science, and in particular the 4th industrial revolution of digital technology and the utilization of data and analysis, open the door to unprecedented opportunities for more efficient water and wastewater management as well as for the design, maintenance and operation of infrastructure. Our mission is neither small nor simple, but we must admit that the challenges we face become manageable because we have technology as a powerful ally.

We at EYDAP, have the good fortune to work in a company that manages one of humanity's basic goods. Water is the most basic commodity of human life but also the basis of economic life. When the supply and demand of drinking water do not meet, sensitive environmental, social and economic ecosystems on which we rely, become at risk. Many people think that we are a technical company that installs, maintains pipes, provides drinking water and removes sewage. And yet we are so much more, a critical link in the chain of the environment.

Circular economy sets the direction for how water and wastewater should be managed: with a holistic optimization of management from water reservoirs to our taps and from the city, through sludge treatment, back to agricultural crops but also to urban green. Urban and spatial planning of cities, industries and agriculture cannot be done without a regard to water resources. We are one of the most important parts in this equation. We remain committed to the best utilization of water reservoirs, the least possible interference in the natural water cycle. Obviously, one of the main challenges is whether the infrastructure we have will be managed in a smart, efficient and beneficial way. We now have every available tool that the constant evolution of technology offers.

We can monitor our infrastructure remotely, in real time knowing what is happening. We can create a "digital twin" that provides secure monitoring of the situation at all times. We have the ability to prevent failures instead of trying to fix them. Sensor technology for information gathering combined with mature processing methods can reduce maintenance costs and improve water and sewerage services. Today, pipeline leak detection is made possible by acoustic signals from intelligent sensors that detect the "whistle" that water makes when there is a leak. There are smart devices that run through the pipelines to record their status signals, drones capable of taking and comparing aerial photographs and satellite images that allow us to detect suspected leaks or geological changes that need to be investigated.

EYDAP is doing a lot to stay on the path of Sustainable Development and sustainability as required by its mission. Although it is certain that in the near future we are going to have the opportunity to do more for environment, man, society.

Theodora Varvarigou

Chairman of the Board of Directors



GRI 102-14

## **CEO's Message**



#### Ladies and gentlemen,

We are pleased to share with you the Sustainable Development Report of EYDAP for 2019. I am sure that by going through the pages, texts, tables and diagrams you will see how much equipped, the strength of the largest water supply and Sewerage Company in Greece, one of the largest in Europe.

I'm not just talking about the company's financials and performance, which are certainly important, they are central priorities for the company's Board of Directors. I would like to remind you here that the net profit this year reaches 58.1 million euros compared to 48 million euros in 2018 (increased by 21%), the reduction of operating costs is estimated at 3% and is 255.1 million euros from 263 million euros in 2018 while earnings per share are at 0.55 euros from 0.45 euros in 2018.

However, it is not only the financial performance that attracts our attention. We have adopted a long-term vision for the company and we want to plan for the future. We are very much interested in this year's profits but we are not indifferent to the future ones. Instead, we prepare them.

The aim of the Administration is to consolidate the conditions for sustainable development, while adopting a clear plan for the transformation of the Company into a modern and efficient Organization, which ensures the efficient use of water resources, creates value for shareholders, gives priority to the customer, and even ensures a fair and dynamic work environment.

In this endeavor, while preparing for the future, we learn from the past. Last year, 90 years had passed since the construction of the Marathon dam. It was a great project of the time that was realized because inspired people used the technology of the time, worked hard, private companies cooperated with government agencies, domestic businesses and international, implemented a project that solved city's problems, and all of that with respect for the environment and with perspective.

We all serve the same model of commitment, hard work, respect for the environment and reliability. And we are proud of the work offered by those who work or collaborate with the company and serve the same principles and practices. Our priorities are non-negotiable and simple: Safety at work, Efficiency in operation, Development for the benefit of society.

The times we live in are full of challenges, but we are optimistic because the most important asset we have is the trust of the consumers, people who enjoy our services and know that we are always by their side, with them at every moment, adding an extra step each day towards the common effort of sustainable development.

Haris Sachinis
Chief Executive Officer

## **Deputy CEO's Message**



#### Dear Shareholders & Stakeholders,

We are going through a period of significant changes and developments for our daily lives. The coronavirus pandemic is changing our lives, but at the same time it reminds us of values we have almost forgotten because we took them for granted. It reminded us of the value of human life, of solidarity, of human potential, linking all of the above to the importance of sustainable development. The epidemic has re-established our priorities.

During this period, the Company continued to give priority to the value of life, putting the safety of its Employees and Customers first. Against the crisis of COVID-19, EYDAP acted immediately, with quick reflexes, a high sense of responsibility both towards the society it serves and towards its people, who are its cornerstone. She proved that her people are her strength and that organized and targeted work, solidarity, cooperation and team spirit are behind every successful endeavor, especially in times of crisis.

Our goal remains to strengthen the culture of safety, of our employees and partners, their continuous training in the use of new equipment and safe work practices, as well as the improvement of conditions and modes in the work environment, so that we achieve zero accidents in workplace, but also to be pioneers in adopting safe work standards.

Sustainable development is inextricably linked to EYDAP's business strategy. It goes through every aspect of our operation, from the management of raw water to the treatment of sewage and its recycling for urban and suburban irrigation. We work intensively with this philosophy, so that our fellow citizens in Eastern Attica, who will be added to the large family of EYDAP's Customers, will also be enjoying high level services. To this end, the Company has stepped up efforts to implement the design of integrated urban wastewater management projects in Eastern Attica, having already launched tenders for the networks and the Rafina – Spata, Artemis – Pikermi Wastewater Treatment Plant (WWTP), while taking the necessary actions to implement the other sewerage projects in the wider area, such as the Marathon WWTP, the Paiania – Koropi WWTP, the Oropos WWTP as well as the sewerage network's support projects.

Especially in terms of the environment, our responsibility for immediate resolution of the issue of sewerage services in Eastern Attica requires our immediate intervention, our rapid mobilization, finding mutually acceptable solutions, in order to do our part towards the protection of our planet. It is the least we can do for the present and for the future, for our families and for the generations to come. Finally, the pandemic did not change our strategic direction. We continue to do what is necessary to fulfill our mission balancing between Workers, Society and Shareholders.

Anastasios Tossios
Deputy Chief Executive Officer



GRI 102-48, GRI 102-49, GRI 102-50, GRI 102-51, GRI 102-52, GRI 102-53, GRI 102-54, GRI 102-55, GRI 102-56

## **About the Report**

#### **Report Profile**

The Sustainability Report of Athens Water Supply and Sewerage Company S.A., with the distinctive title EYDAP S.A. (for the sake of brevity hereinafter referred to as the "Company" or "EYDAP") is a systematic review of the Company's Economic, Social and Environmental performance in 2019, with a reference period from January 1st 2019 until December 31st 2019. This report was structured in accordance to Core GRI criteria, intending to meet the stakeholders' needs and expectations and to present the way the organization manages its material impacts, within the context of Sustainability.

The organization's impacts were assessed against the 17 Sustainable Development Goals set by the United Nations, on a nationwide scale. More information on the specification of the content of this report and the materiality analysis is available in section "Sustainable Development Materiality Analysis".

The GRI table of contents, on page 200-202, lists the relevant references to the Report.

In this Report, there is a clear reference to recast data from previous editions, but there is no diversification of the material issues and their boundaries. This Sustainability Report is not externally certified, but its data and content were reviewed and approved by the relevant Directorates-General and Higher Management.





## Tell us your option

The provision of material information to EYDAP's stakeholders is our main target, so we encourage any remark or comment that can contribute to our effort for continuous improvement. Communication details are available below:

#### **EYDAP**

9, Ilission & Laodikeias St., 157 71, Athens Contact No:

+30 210 7495420 & +30 210 7495412

Email: pubrel@eydap.gr



## **Selected Elements 2019**



#### 99.822% **EYDAP's Quality of Water**

International Evaluation of Water Supply Companies 2019 **European Benchmarking** Cooperation

#### 10 (Excellence) for **Quality of Water**

Urban Water Atlas for Europe 2017

#### **Gold Award**

in the category "Continuous Business Improvement" for the Administrative Modernization project

#### Silver Award

in the "Systems Integration" category

#### **Bronze Award**

in the "Big Data" category for the Digital Data Governance project.

**Impact Business IT Excellence Awards 2019** 

#### **Gold Award**

to the Department of Internal Audit for outstanding performance in the principles of business ethics and the model of responsible management

Responsible Management Excellence Awards EBEN GR

The only company in the wider Public Sector, which holds the internationally recognized RME MODEL certification awarded for the second consecutive year!



#### **WATER SUPPLY**

**Drinking Water** of Excellent Quality The largest provider of water services in Greece



1.050.310 m<sup>3</sup> Drinking water/ day



4.400.000 inhabitants Served population



Reservoirs



495 km **External aqueducts** Maintenance & Operation



14.000 km ducts



**4 Water Treatment Plants** (WTP) with a cumulative maximum refining capacity of 1,900,000m3 of water per day



Stages Water Refining



365 days a year drinking and raw water quality controls



On-line monitoring of critical quality parameters



**Accredited Water Quality** Control Laboratories



Quality controls of raw materials according to international standards



1.000 drinking water quality control points



10.000 samples of drinking water and 2,000 samples of untreated water per year



2.160.000 water connections



57 reservoirs with a total capacity 885,000 m<sup>3</sup>



77 pumping stations with a total capacity of 33,200 HP



90,000 isolation valves



1,246 data recording and telecommunication points (SMS) και (GPRS)



100 monitoring points with Remote **Control - Telemetry** system (Scada)



water meters





## **95%** Removal of sewage load

**2,217** workers



9,500 km Sewerage network



1,065,000 m³ sewage/ day cumulative processing capacity



<60%
reduction of CO<sub>2</sub>
emissions in 5 years in
Psyttaleia WWTP



Accredited wastewater chemical analysis laboratories: 12,000 wastewater samples 66,000 analyzes per year



3,975,000 inhabitants Population served



Basic drainage collectors: Central Coastal Collector Parakifissios Supplementary Central Sewer Pressure Relief Duct



Special waste control in plants connected to the sewerage network



44 pumping stations



755,500 m³ sewage/day cumulatively treated at the WWTPs



3 Wastewater Treatment Plants: Psyttaleia, Metamorphosis, Thriassion



Input and output quality control at the WWTPs



Monitoring the operation of pumping stations with Remote
Control - Telemetry systems - (SCADA)

**757** womer

1,743

434 university graduates

226 technical school graduates

of which

135 with a master's degree

**32** with a doctorate



#### **CUSTOMER-CENTERED APPROACH**

**12** Regional Centers

**Developed Digital Services** 

**Execution of 20 Administrative Procedures through Citizen Service Centers** 

1022 hotline 24/7 consumer communication

#### Scaled pricing

Continuous communication & information of consumers through corporate website, social media and SMS, in case of identified customers

#### **Emphasis on Special Customers**

**Special pricing** (industrial profesional, philanthropical, support of Municipalities

and Communities, water supply of islands, supply of ships)

Extraordinary Special Billing to the beneficiaries of Social Solidarity Income

#### Specially designed services for the visually impaired

Initiatives for the relief of vulnerable economic groups

Initiatives to alleviate financially weaker groups

Special Discounts on large families, seniors and in cases of increased bills under statutory conditions.

On line consumer access to smart meter readings



HADRIAN'S AQUEDUCT
Capture and Development
Studies

Anniversary Exhibition
"The Great Challenge"
90 Years since the Construction
ofthe Marathon Dam,
"Hellenic World" Culture Center

Corporate History
Archive Policy



## CIRCULAR ECONOMY ENERGY SAVING



4,789,043 m<sup>3</sup>

**Reuse of recovered water** from thw Psyttalia-Metamorphosis WWTPs

515.000 KWh

Electricity generation at the Acharnai Photovoltaic Station from 3/10/2019 - 31/12/2019

20,474,644 KWh

Electricity generation from small hydroelectric power stations (SHPS) along the external aqueducts

2,225,360 KWh

**Electricity** production from a small hydroelectric unit in the outflow pipeline in Psyttalia

30,774,064 m<sup>3</sup>

Biogas consumed for the production of thermal and electrical energy at the Psyttaleia WWTP

31,506,800 m<sup>3</sup>

Biogas produced at the WWTPs

26,201,220 KWh/year

Total electricity generated from Biogas at the WWTPs

5,266,830 KWh/year

Thermal Energy obtained from the process of generating electricity at the Psyttaleia WWTP

3,693,055 KWh/year

Thermal energy produced from biogas at the Metamorphosis WWTP

28,741 kgr

Recycled paper

338 kgr

**Recycled batteries** 



#### **SYNERGIES**

with Greek Educational, Research Institutions and with Scientific Bodies

## **Major Events in 2019**

Customer Satisfaction Survey June 2019

In June 2019, EYDAP conducted a customer satisfaction survey which pointed out the almost unanimous trust in EYDAP and the satisfaction from its services and its pricing policy. The vast majority of consumers welcomes the quality, the safety and the price of services provided by EYDAP.

Change in the Composition of the Board of Directors of EYDAP S.A. June 2019

In the Annual Ordinary Shareholders' General Meeting, held in June 26, 2019 elected the nine Members of the Board of Directors of EYDAP S.A., with a five-year term of office.

Photovoltaic Park 2 MW October 2019

A 2MW Photovoltaic Power Station was put into operation at the Acharnes Water Treatment Plant, where the 60% of the supplied water to the Attica Basin and specifically the areas located at high altitude is treated.

The utilization of renewable energy sources is part of the Company's Energy Upgrade Policy, reflecting a systematic shift to environmentally friendly energy sources aiming at the reduction of the national carbon footprint, in the context of National and European environmental targets for 2030. The construction of the Station, with an investment of 1.6 million euros, was covered entirely by own funds and was completed on schedule, within a period of one month and a half.

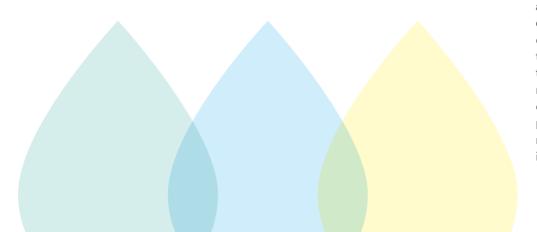
The project, after its successful launch, will continue with the construction of new photovoltaic stations in other corporate installations.

EYDAP
Agreement
with
the Greek State
October 2019

EYDAP in view of the renewal of its exclusive right to provide water and sewerage services in its geographical area of responsibility, in agreement with the Greek State extended the existing contract for six (6) months, until the relevant consultations are completed. The above agreement expired on 25 April 2020 and was subsequently extended until the 31st December, 2020.

Inauguration of Commemorative Exhibition November 2019

The Commemorative Exhibition, on the occasion of the 90 years since the completion of the construction of the Marathon Dam, was organized by EYDAP and held at the Cultural Center «Hellenic World». The Exhibition is dedicated to the emblematic and historical importance of the first modern reservoir of the Greek capital. The aim of the exhibition, presenting for the first time unpublished evidence, is to highlight the importance of the Dam, both from a mechanical and cultural and social point of view, pointing out that innovation of the past could operate as a guide for future innovation and development, in which EYDAP invests systematically.



## **Major Events in 2020**

Optimization
Projects
2nd half
of 2019

During the second half of 2019, the Company decided to start 5 optimization projects in important areas of operation of the Company: Financial Services, Procurement, Human Resources, Customer Services and finally Information Systems.

The goal is to transform the Company into a modern and efficient Organization, which, in combination with the forthcoming signing of the contract with the Greek State, will ensure the efficient utilization of water resources, will give priority to the customer but also to ensure a fair and dynamic work environment. The optimization projects will continue during 2020.

In 2020, the Company aims at the progress of the works for the large projects of Eastern Attica and at the greater absorption of the investments that will lead the Company to a path of dynamic development.



On March 11, 2020, the World Health Organization officially declared the Coronavirus Epidemic - Covid-19 as a pandemic. In the context of social responsibility and the protection of both employees and citizens, the Company implemented an integrated operational plan. This included the temporary suspension of all Customer Service Centers, until May the 4th, 2020 and in parallel reinforced the alternative digital and telephone service channels. By decision of the Ministry of Infrastructure and Transport, in the context of pandemic control and imposed travel restrictions, no water supply connection will be interrupted due to late payments.

The Company's reaction was immediate and the adjustment to the current extraordinary circumstances was made with very fast and mainly efficiently, as its operations continued tsmoothly. Also, due to the immediate measures and the responsibility of the human resources, there were no confirmed cases. The Management of the Company monitors the developments, evaluates the risks and takes the necessary actions in order to continue its smooth operation and the service of its customers. EYDAP continues to adapt and adopt any new technology that will help improve services.

# On March 27, 2020, the Board of EYDAP approved the donation of 2.5 million euros in the fight for the pandemic:

#### **EYDAP**

- covers, with the amount of 2 million euros, the cost for the purchase of medical and hospital equipment and expendables and for the strengthening of intensive care units, in cooperation with the competent bodies.
- provides free water to the reference hospitals, amounting to 500,000 euros for the entire period of the coronavirus crisis.

EYDAP, given its social sensitivity, will continue to support fellow citizens in need, through the implementation of social tariffs.

## EYDAP's actions to achieve the



- Return of value to society by support financially weak social groups, in addition to the relevant Regulatory Framework, through a special pricing policy.
- Special Pricing to beneficiaries.
- Discount to large families and elderly consumers.



- Commitment to constantly improving working conditions and environment with continuous investment and training of employees.
- Strengthen preventive measures.
- Assessment of occupational risk.
- Strengthening safe practices at work.
- Ensuring human rights at work.



- Constant training of employees in new systems and technologies.
- Human resources with a high level of know-how.
- Active participation in scientific conferences with scientific announcements
- Organization of an Anniversary Exhibition with exhibits from its Historical Archive
- Support for young people through special employment programs.
- Sponsorships to schools, universities and support to scientific conferences.



• No discriminations in the base of gender, age, religion



- Drinking Water of Excellent Quality.
- Rational management and ensuring the long-term Sustainability of the water resources system.
- Continuous supervision and maintenance of the water supply system.
- 24/7 drinking and surface water quality controls through constantly evolving systems and methods.
- Supply of free water in 2019 in the areas (Municipalities of Marathon and Raphena) affected from the fires of 2018.
- Water supply for islands.
- Provision of know-how to Municipalities.
- Continuous wastewater collection and treatment services with the most modern methods, with constant quality controls and compliance with acceptable discharge limits.
- Certified Quality Control Laboratories.



- Power generation from small hydroelectric projects installed in aqueducts.
- Cogeneration of electricity and thermal energy using biogas from the treatment of sludge.
- Power generation at the Photovoltaic Station in the facilities of Acharnai WTP.
- Utilization of the thermal content of the exhaust gases of the Cogeneration Units of thermal and electrical energy of Psytallia WWTP.
- Modernization of the refined and unrefined water pumping station in Polindedri WTP to achieve significant energy savings.
- Operation of modern sludge management units in the WTP to reduce the required energy of chemicals.

- Use, as an alternative fuel by the cement industry, of the entire amount of dried sludge produced, a by-product of wastewater treatment.
- Gradual replacement of conventional lamps with LED type, in buildings owned by EYDAP.



- Full observance of labor legislation.
- Support for professional and individual development of employees.
- Continuous training of human resources.



- High know-how and use of specialized tools.
- Gradual transition to the smart water network.
- Reuse of the treated water from the sludge treatment in the WTPs within the facilities.
- Reuse of recovered water from wastewater treatment in WWTPs within the facilities.
- Gradual implementation of important integrated wastewater management projects with the possibility of reusing the treated effluents for irrigation purposes.
- Continuous modernization and maintenance of the sewerage network using new technology.
- Development of research programs for on-site partial treatment of wastewater, with direct pumping from the network, for Sewer Mining.
- Participation in research projects.
- Synergies with Higher Education Institutions and Research Centers.
- Special pricing for water use by businesses.

## Sustainable Development Goals



- Equal treatment of consumers based on statutory and specific procedures.
- Specially designed services for the visually impaired
- Sponsorships to sports and cultural clubs.
- Financial support to institutions and infrastructure projects with social work.



- Access of all citizens to clean water.
- Proper operation, maintenance and improvement of the drinking water distribution network.
- Collection and return of clean wastewater to the environment.
- Monitoring the proper operation of wastewater treatment plants.
- Approval of Environmental Terms for each Wastewater Treatment Plant – Water Treatment Plant and External Water Supply System.
- Reporting on the amount of pollutants released to the atmosphere from wastewater treatment.
- Preparation of studies for the utilization of Hadrian's Aqueduct.
- Quality customer service.



- Gradual water consumption pricing.
- Development of new Digital Services.
- Adoption of circular economy principles.
- Information campaigns to raise public awareness on the rational use of water and the adoption of good environmental practices.
- Promotion of major water supply and sewerage projects – Anniversary Exhibition at the Foundation of the Hellenic World.
- Educational programs for institutions and students of all educational levels during facility visits.
- Paper and battery recycling.



- Full compliance with environmental legislation.
- Stable reduction of energy footprint.
- Respect for the principles of the circular economy.
- Transfer of unrefined water from the reservoirs with the force of gravity, without the use of energy consuming pumps.
- Continuous development of leak reduction and pressure control programs in the network.
- Sewage transport through gravity pipes, where possible.
- Participation as a member of the steering committee in the design of a European tool to support synergies between sewerage companies for the achievement of the Sustainable Development Goals 2030.



- Return of treated wastewater to the environment.
- Protection of Aquatic Ecosystems.
- Protection of the marine ecosystem, with evaluation in collaboration with ELKETHE. Publication of data on the National Database.

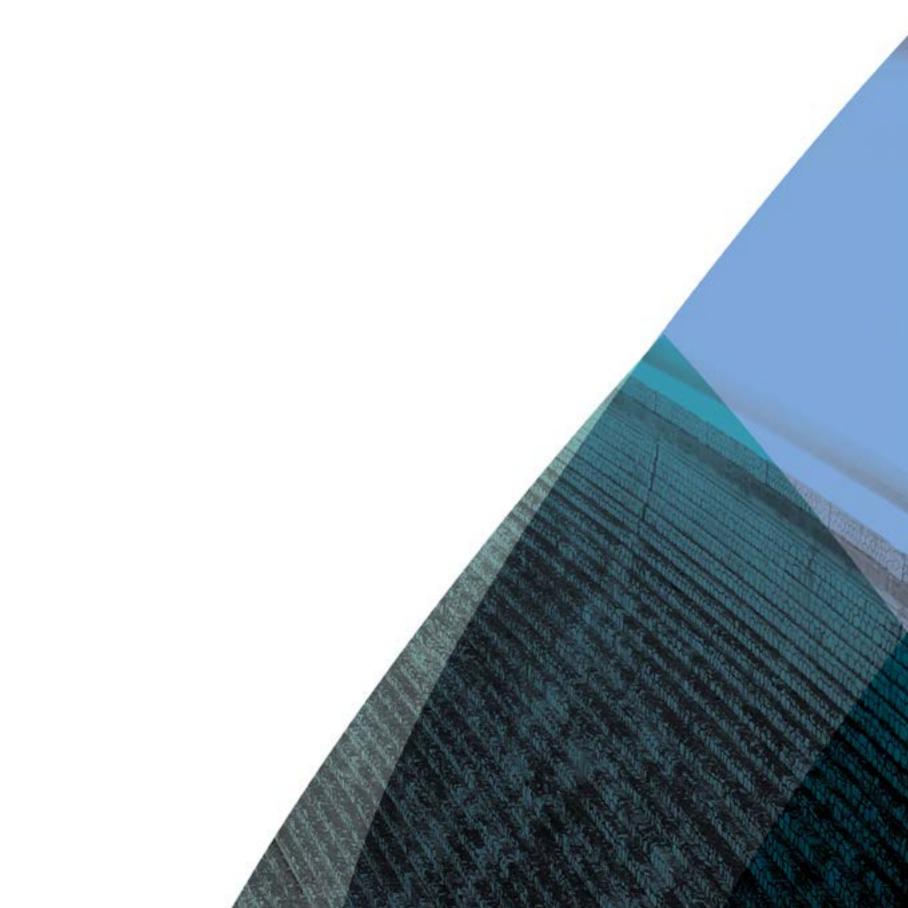


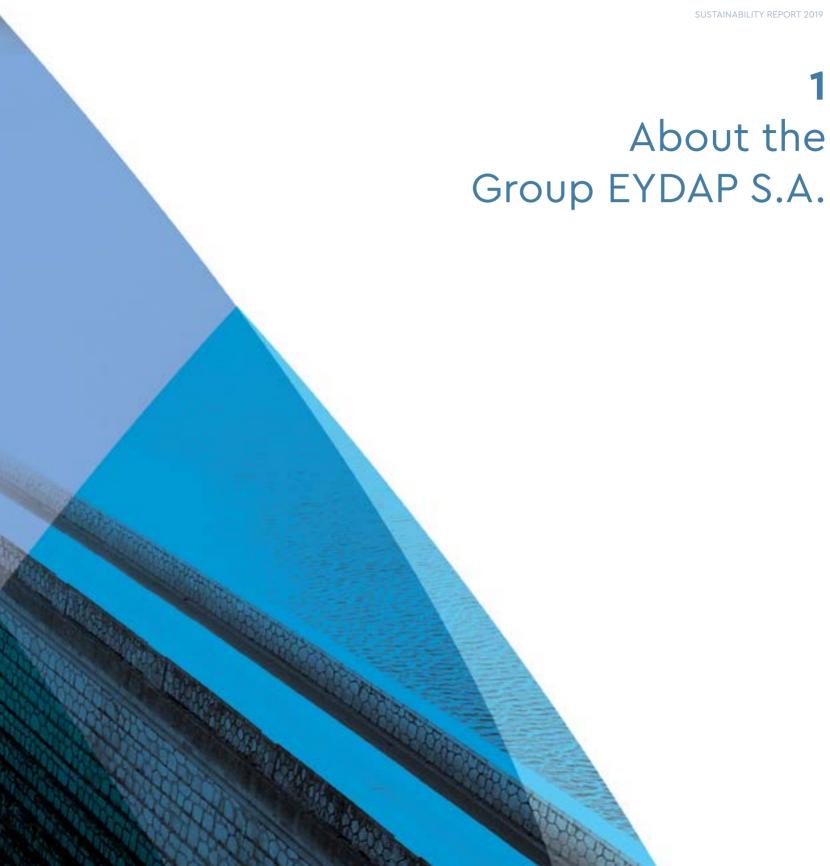
- Protection of the natural resource of water.
- Protection of the wetland ecosystems around reservoirs.
- Biodiversity Protection.
- Protection of underground aquifer with innovative actions.



- Full harmonization with National and EU Law.
- Establishing an Anti-Corruption Policy.
- Regular Audit by Chartered Auditors.
- Corporate Governance Code.
- Internal Operating Regulations.
- Regulation of Internal Operation of Personnel.
- Public Procurement Contracts with faithful application of the law.
- Sponsorship Policy Planning.
- Cultural Heritage Protection Corporate History Archive Management Policy.







GRI 102-1, GRI 102-2, GRI 102-3, GRI 102-4, GRI 102-5, GRI 102-6, GRI 102-7, GRI 102-45, GRI 102-9 GRI 102-13. GRI 102-16. GRI 102-18. GRI 102-22. GRI 102-31. GRI 303-1(2018)

## 1.1 EYDAP S.A. Group Profile

#### The Leading Company in Water Industry in Greece

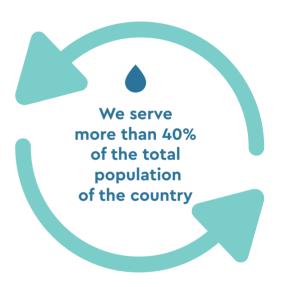
"Athens Water Supply and Sewerage Company S.A." (or "EYDAP" or the "Company") is the leading company in the sector of water supply, sewerage and waste treatment in Greece, covering the needs of more than 40% of the total population of the country.

### The water EYDAP supplies Attica is one of the best in Europe.

The main water sources and reservoirs used, are located in pristine areas free from agricultural and industrial activity, hence the Greek capital is supplied with water of excellent quality, while its transport is done naturally by gravity, with low energy consumption. Assessing its size and know-how, EYDAP is ranked among the largest commercial and industrial companies in Greece.

In 2019, EYDAP in the field of water supply, through 14,000 kilometers of network served about 4,4000,000 customers (approximately 2,160,000 connections), while in the field of sewerage with a network of 9,500 kilometers, it served approximately 3,975,000 customers. Wastewater management is done by designing and implementing an integrated treatment system in the Wastewater Treatment Plants, with particular importance for the protection of the environment.

The responsibility for the drainage of rainwater and flood protection in the areas of EYDAP's competence, under law 2744/1999, fell to the then Ministry of PEHODE, while today, according to current legislation, responsible for the study, construction, maintenance of rainwater drainage works and flood protection works in general, as well as for the cleaning of water collection wells, are the Region of Attica and the Local Municipalities.



The "Water Supply and Sewerage Company of the Capital" was established with Law 1068/1980 "on the establishment of a single Water Supply and Sewerage Company for the Capital" after the merger of the Hellenic Water Company of the Cities of Athens – Piraeus and surroundings (EEY) and the Sewerage Organization of the Capital (OAP). The headquarters of the Company are located at 156 Oropou Street, in Galatsi, Attica.

In 1999 with law 2744 / 25.10.1999 "Regulations of issues of the Water Supply and Sewerage Company of the Capital and other provisions" EYDAP came into its current legal form, as the main assets of the Company were absorbed by the Company of Fixed Assets EYDAP property of the State. The Company owns the dams, the reservoirs, the external aqueducts and pumping stations, as well as the other facilities that ensure the safe transport of water to the facilities, which are treated for conversion into drinking water. However, with an Agreement signed between EYDAP and the Greek State, in December 1999, EYDAP continues to manage the operation and maintenance of the existing structures of the External Water Supply System (EYS) on behalf of the Fixed Assets Company.



EYDAP was granted the exclusive right to provide water supply and distribution services and sewage services in the region of Attica for 20 years starting from the date of publication of law 2744/1999. This right is non-transferable and can be renewed after a written agreement between the Company and the Greek State. In January 2000, the Company was listed on the Athens Stock Exchange.

EYDAP is supplied raw water from the Greek State, which in turn is obliged to provide EYDAP with sufficient quantities of untreated water, in order the latter to be able to respond to the water supply demand in its area of competence, as further analyzed in the relevant section.

With the same above-mentioned Contract, EYDAP counterbalances the price of untreated water with the arising maintenance and operational cost of fixed assets belonging to "EYDAP Fixed Assets" (Legal Entity under Public Law) thus covering its relevant obligation, affecting its financial results accordingly. In this way the Company is able to control, primarily and thoroughly, the technical projects for the transfer of untreated water from the sources to the Water Treatment Plants (WTPs).

Consultations for the signing of a new contract with the competent Ministries and "EYDAP Fixed Assets" are already underway. The existing contract was initially extended for 6 months, i.e. until 25th April, 2020 and then until 31st December, 2020 for the relevant talks to be completed.

With a sense of responsibility towards millions of consumers and with continuous investments in technology and training of its human resources, EYDAP cares to provide tap water, one of the cleanest in Europe, at an affordable tariff.





#### EYDAP NISON DEVELOPMENT S.A.

In July 2011 the company "EYDAP NISON SA" was established. EYDAP owns 100% of EYDAP NISON S.A. share capital. The purpose of the Company is the provision of water and sewerage services ti the Greek island, along with a series of either activities related to its core business.

In January 2013, an amendment voted by the Parliament created the legal framework, according to which, EYDAP or its subsidiaries can undertake the preparation or assignment of studies for the construction of projects related to the Company's activities, as well as the assignment and the administration of the projects in island regions. In March 2013 "EYDAP NISON S.A." proceeded to an increase in its share capital by 30,000 euros, while on the 7th of February 2014, in the extraordinary general meeting of EYDAP NISON S.A., a new share capital increase of 150,000.00 euros was validated.

On the 22nd of October 2014, EYDAP S.A., following the 18460/22.10.14 Decision of the BoD, approved the increase of the share capital of EYDAP NISON S.A. by 1,000,000 euros, paid in two equal installments of 500,000 euros on the 1st of November and the 1st of July 2015.

At the Extraordinary General Meeting of the 21st of September 2017, the amendment of article 1 was approved, which changed the name to "EYDAP NISSON DEVELOPMENT S.A." along with that of article 2 (purpose) permitting the undertaking of activities within the Greek territory and beyond the Area of Competence of EYDAP S.A. as defined in article 8 of Law 2744/1999.

On the 30th of July 2019, a new Board of Directors was appointed with a term of office until 26/05/2022, was formed into a body and consists of the following members:

Harry Sachinis – Chairman of the Board and the company's CEO Anastasios Tossios – Member Konstantinos Vougiouklakis – Member Georgios Karagiannis – Member Petros Matsoukis – Member

#### **Purpose**

is to utilize the undoubted expertise, the experienced personnel and the modern technology of EYDAP S.A. for the provision of high quality services in the sector of water supply and effluent treatment to the Greek islands, as well as to other areas of Greece that might need them.

#### Target

to transfer to the local water and sewerage companies the decade-long experience of EYDAP S.A. in the sustainable management of water resources, in the application of new technologies, in the utilization of national and European funds ensuring at the same time the proper operation of facilities and the protection of the environment at the minimum cost for the citizen and the local community.

#### Policy

is to accept requests from Local Authorities beyond EYDAP S.A. Area of Competence so as to contribute to problem solving arising in existing water-sewerage networks, as well as to the drawing of a master plan for the management of the cycle of water.

#### **ACTIVITIES COMPLETED IN 2019**

#### Kassos Island

Contract signed with the Municipality of Kassos in December 2019 for water supply pricing policy consultancy services. The project is expected to be delivered to the Municipality in the first half of 2020.

#### DFYA of Kastoria

Completion of the contract signed in 2019 with the DEYA of Kastoria for the cleaning of the wastewater pumping stations A' and B' of the city of Kastoria. Submittion of a new tender, at the request of DEYA of Kastoria, for the technical support of works and watering services for the city of Kastoria.

#### **DEYA of Nafplion**

Completion of the contract with the DEYA of Nafplion concerning the cleaning of wastewater pumping stations, cleaning and maintenance of sewerage networks. Submission of tender in the notice of invitation for sewerage network maintenance services with a view oto its completion in 2020.

#### DEYA of Patras

Signing of a contract with the DEYA of Patras for the cleaning of three sewerage pipes. Works will be completed in the first half of 2020.

#### **Proposals for Cooperation**

EYDAP Nison Development S.A., following a request and after the conduction of an autopsy, submitted in 2019 proposals for cooperation with DEYA Skiathos, DEYA Thira, the Municipality of Lefkada, DEYA Kastoria, DEYA Patras and the consortium DIALYNAS S.A. – ECOSTART S.A. in Argos.



#### **AREA OF COMPETENCE**

The metropolitan area of the Capital was defined as the area of responsibility of EYDAP S.A., as it is defined in its founding law 1068/1980. At the same time, according to law 2744/1999, EYDAP S.A. has the exclusive right to supply water and sewerage services in the geographical area of its jurisdiction. This right is inalienable and nontransferable. The duration of this right, which is valid for 20 years, as well as its renewal, is regulated by the Contract signed between the Greek State and EYDAP S.A. This Agreement was signed in December 1999. Recently, with article 68 of law 4313 / 17-12-2014, article 8 of law 2744/1999 EYDAP S.A. area of activity was amended. It was extended to all the Municipalities of the Attica Region, as they are defined in subsection i of par. 3 of article 3 of law 3852/2010 except for the Municipalities of Aegina, Trizinia, Kythera, Agistri, Spetses, Hydra and Poros, of the Regional unit of islands of the Attica Region.

More specifically, EYDAP S.A. area of competence covers the administrative boundaries of the following Municipalities and Municipal Units, which it either supplies directly or with bulk water supply:



#### Municipalities and Municipal Entities Within EYDAP SA's Area of Competence

#### Direct water supply by EYDAP S.A.

- Aghioi Anargyroi Kamatero
- Aghia Varvara
- Aghios Dimitrios
- Aghia Paraskevi
- Athens
- · Aigaleo
- Alimos
- Maroussi
- Aspropyrgos
- Voula
   (Municipality of Vari-Voula-Vouliagmeni)
- Vouliagmeni (Municipality of Vari-Voula-Vouliagmeni)
- Vyronas
- Galatsi
- Dafni-Ymittos
- Elefsis (Municipality of Elefsis)
- Elliniko-Argyroupoli
- Zephyri (Municipality of Phyli)
- · Zographou
- Helioupoli
- Herakleion
- Thrakomakedones (Municipality of Acharnai)
- Helion
- Kaissariani
- Kallithea
- Keratsini-Drapetsona
- Koridallos
- Likovrisi-Pephki
- Magoula (Municipality of Elefsis)
- Melissia, N. Penteli (Municipality of Penteli)
- Metamorphosis
- Moschato-Tavros
- Nea Ionia
- Nea Smyrni

- Nikaia-Aghios Ioannis Rentis
- Papagos-Cholargos
- Piraeus
- Penteli
- Perama
- Peristeri
- Petroupoli
- · Palaio Phaliron
- Salamis
- · Philadelphia-Chalkidona
- Philothei-Psychikon
- Chaidari
- Chalandri

#### Bulk Water Supply to Municipal Networks (\*)

- Ano Liosia, Phyli (Municipality of Phyli)
- Vrilissia (Municipality of Vrilissia)
- Dionysos, Anoixi, Aghios Stephanos, Kryoneri, Stamata, Drossia, Rodopoli (Municipality of Dionysos)
- Ekali, Nea Erythraia (Municipality of Kiphissia)
- Keratea, Lavreotiki,
   Aghios Konstantinos
   (Municipality of Lavreotiki)
- Kouvaras, Anavyssos, Palaia Phokea, Saronis (Municipality of Saronis)
- Mandra, Villia, Erythrai, Oinoe
   (Municipality of Mandra-Edyllia support from EYDAP's S.A. network and from the system of external aqueducts of EYDAP Fixed Assets via a fast refiner situated close to the Thiva Centre of Regional Control)
- Marathon, Nea Makri, Varnavas, Grammatikon (Municipality of Marathon)

- Markopoulo in Mesogaia (Municipality of Markopoulo in Mesogaia)
- Paeania (Municipality of Paeania)
- Raphina-Pikermi
- Spata, Artemis, (Municipality of Spata-Artemis)
- Oropos, Kalamos, Markopoulo in Oropos, Polydendri, Sykamino, (Municipality of Oropos, support from EYDAP S.A.'s network and from EYDAP S.A.'s drillings at Mayrosouvala)

#### Joint Water Supply System (\*\*)

- Anthoussa, Gerakas, Pallini (Municipality of Pallini)
- Acharnai (Municipality of Acharnai)
- Vari (Municipality of Vari-Voula-Vouliagmeni)
- Glyka Nera (Municipality of Paeania)
- Glyphada (Municipality of Glyphada)
- Kalyvia in Thorikon (Municipality of Saronikos)
- Kiphissia (Municipality of Kyphissia)
- Municipality of Kropia
- Megara-Nea Peramos (Municipality of Megara)

<sup>\*\*</sup> Regions served via joint water supply system: certain parts of the aforementioned Municipal Entities are directly supplied by EYDAP while other parts either by bulk water supply or via boreholes under the responsibility of the Municipality.



<sup>\*</sup>Regions served by EYDAP via municipal networks. EYDAP is neither involved nor responsible for the operation of these local networks.

#### MUNICIPALITIES AND MUNICIPAL GROUPS BEYOND EYDAP'S COMPETENCE

#### Water Supply with or without participation of EYDAP in the local network

Along the Mornos' and Yliki's aqueducts, there is a number of Municipalities, Municipal Groups and Regions, beyond EYDAP's competence, supplied either with EYDAP treated water through small water refinery units or with raw water directly by "EYDAP Fixed Assets". Water in both cases is supplied via special water connections supplied to the local municipalities, without EYDAP's participation in the operation of the local network. EYDAP, also supplies treated water (transferred using water tankers) to islands of the Southern Aegean Region and the Regional Unit of Islands of the Region of Attica through special water supply connections. Finally, EYDAP supplies with raw water, via special water supply connections, a certain number of large private production units that operate along the main external aqueducts.

• Drinking Water supplied by EYDAP S.A. to Municipalities and Communities, through small water refinery units (fast refiners) and special water supply connections along Mornos aqueduct.

#### Specifically:

- From the fast refiner situated close to Distomo, water is supplied to Distomo and Steiri both part of Municipality of Distomo-Arahova-Antikyra.
- From the fast refiner situated close to Kyriaki and the villages of Tarsos-Karyotis and Panagia Kalamiotissa, water is supplied to Kyriaki and the villages of Tarsos, Karyotis and Panagia Kalamiotissa (Zaltsa) all part of the Municipality of Levadia.
- From the fast refiner situated close to Thebes Control Centre and the Communities of Kaparelli, Lephktra, Ellopia, Dombraina and Prodromos, water is supplied to Plataiae, Kaparelli, Melissochori, Aghios Vassilios, Loutoufi, Lephktra, Ellopia, Xironomi, Dombraina, Thesvi, Prodromos and Saranti Coast all part of Municipality of Thebes.
- Raw Water Supply by "EYDAP Fixed Assets" from special water connections, technically and operationally supported by EYDAP S.A. Water is refined under the responsibility of the Local Municipalities, at local refinery units

#### More Specifically:

- Municipality of Delphi supplies water to Amphissa and Desphina
- Municipality of Thebes supplies water to Thebes and Thisvi
- Municipality of Tanagra supplies water to Tanagra, Oenopheta, Schimatari and Aghios Thomas
- Municipality of Chalkida supplies water to Avlida

GRI 102-16

• EYDAP SA supplies with drinking water (transport by water tankers) the islands of the Regional Unit of Attica and the South Aegean Region, through special connections

EYDAP SA provides with treated water (transported by ships) the **municipalities** of Aegina and Agistri, through special water connections, without the participation of EYDAP S.A. in the operation of local water supply networks.

EYDAP SA also provides with treated water, through special water connections at Lavrio, islands of the South Aegean Region (Cyclades etc). The water is transported by water tankers.

It is important to mention that Law 2744/99 and the recent amendment of Article 8 of the same law provide EYDAP S.A. with the **potential of expanding its activities** to other areas other than those defined in paragraph 1 of amended Article 8 of Law 2744/1999.

A prerequisite, for the attempted expansion of EYDAP S.A. activities, is the Company to ensure both the reasonable return on investment and the funding of operations with own or private funds for the proper fulfillment of its obligations. The enactment of law 4053/2012, which provides EYDAP S.A. with the ability to supply the full range of its service as defined in law 2744/1999 and beyond the area of its competence, through subsidiaries and contracts with the Local Authorities, forms a new growth framework and expansion of market opportunities.

**EYDAP S.A.**, in order to ensure the water supply of the major area of the Capital, acquires raw water from the State, which has agreed to obtain it from appropriate sources and to deliver it to EYDAP SA. According to the provisions of Law 2744/99 and the contract with the Greek State from December 1999, the price of raw water will be offset by the cost of services offered by EYDAP SA for the maintenance and operation of fixed assets belonging to EYDAP Fixed Assets.

## EYDAP'S GOALS AND ACTIVITIES

Provision of water-supply and sewerage services, as well as preparation of studies, construction, installation, operation, exploitation, management, maintenance, expansion and update of water-supply and sewerage systems.

Pumping, desalination, treatment, storage, transfer, distribution and management of all kinds of water, as a means of serving EYDAP's aforementioned goals.

Projects & procedures for the collection, transfer, storage, process, management and disposal of wastewater treatment products.

Provision of telecommunication, energy and other associated services and their if applicable, on condition that the safe and reliable operation of water and sewerage system is not jeopardized, for other purposes such as the deployment of telecommunication and energy activities.

Study and exploitation of natural springs and water resources, production and bottling of water and other refreshments or beverages containing water.

Use of know-how and provision of technical support. Investments related to the scope and the activities of the Company.





To remain the largest and most reliable company in the management of water cycle, always oriented towards People and the Environment.

To provide drinking water of high quality at an affordable price to an increasing number of citizens and to return it to nature clean, through the Sustainable management of all available resources, with sensitivity towards society's needs, oriented to society's welfare.

#### **Our Strategy**

Is based on the achievement of a balanced and Sustainable Development for the benefit of our stakeholders and the Sustainability of the environment and natural resources. The continuous improvement of the quality of services provided to our customers, in combination with affordable pricing, is the pillar of EYDAP's strategy. In the context of optimal service, EYDAP operates under an innovative client -oriented service system, thus achieving the satisfaction of its customers along with the financial strength of the Company.



#### Main Actions for an Integrated Modernization Program

- Adoption of modern financial planning techniques
- Restructuring & simplification of internal & external procedures
- Application of modern techniques for remote monitoring and remote operation in order to ensure efficient network operation
- Implementation of crucial interventions in the network for the prevention of repeated costly damages
- Implementation of modern techniques & tools of risk management
- Expansion of e-Government in customer service
- Adoption of modern systems for the development and management of human resources
- Implementation of a new cooperation model with the Municipalities
- Enhancement of regulatory compliance and obtainment of relevant certificates
- Production of business plans for new ventures and geographical expansion within and out of the Attica region

#### **Application of the General Data Protection Regulation**

EYDAP with a special sense of responsibility and respect to the customer, employee, supplier, partner, whose data is processed in the context of cooperation and transaction, took special care and, from April 2018, before the implementation of its provisions General Data Protection Regulation EU 2016/679 (hereinafter «GDPR»), which is in force from 25.05.2018, appointed a Data Protection Officer (DPO).

Based on the continuous compliance of the Company, the designated DPO monitors, with complete independence from the orders of the Management (as required by the GDPR), the compliance of the Company in the light of the provisions of the GDPR EU 2016/679 and the current national legislative framework (law 4624/2019, law 3471/2006), expressing its views on issues related to the processing of personal data. At the same time, it updates the organizational measures taken, addresses any vulnerabilities, updates their correction, proposes solutions for optimization of

existing procedures (where and in cases in which the issue of personal data processing is raised), communicates with and guides where necessary in order to achieve the fastest, most timely and most effective satisfaction of the requests of the Subjects. Therefore, in the context of the innovative actions concerning the establishment and operation of a DPO office, and following the actions that took place in a previous year, as detailed in the Report for the year 2018, the action of the DPO office continues and has taken place to date the following actions:

1. Update of the Activity Archive in the total of the recorded activities of the Company, which currently amount to 325 in number, in coordinated cooperation and communication with the executives of the General Directorates of the Company. Through the process of updating the Archive of Activities, questions, thoughts, relevant issues and issues were covered, as well as any vulnerabilities on almost all the Services of the General Directorates of EXD.AP.S.A.

- **2.** Daily resolution of concerns on issues of processing of personal data in matters that concern the Services of EYDAP S.A.
- **3.** Update of the Policy of Proper Use and Protection of Personal Data of the website of E.YDAP. SA, taking into account and integrating in detail the new activities / processes carried out by the user, during his navigation on the website of E.YDAP. SA (www.eydap.gr) and when using the services.
- 4. Drafting of new necessary Policies: In particular, the Policy on the Cookies of E.YDAP SA's website was drafted, guided by the new relevant legislative requirements and best practices. The Policy for the Correct Use of Mobile Devices and End-User Information was drafted and the Application for the Provision of a Corporate Device was updated in terms of personal data. The Personal Data Protection Policy of the Shareholders of E.YDAP SA was drafted, while special consent forms were provided regarding the provision of cars and e-pass cards.
- **5.** Clear instructions were given to the competent organizational units regarding the routing / management of the above texts.

- **6.** Regarding the information systems and applications used in the Company, the DPO office, in constant communication / collaboration with the IT Department, recorded and submitted the comments-remarks and suggestions, in order to optimize existing procedures and policies.
- 7. Regarding the contracts with external partners, suppliers, health providers, E.YD.AP. SA has already forwarded the relevant questionnaires-instructions in order to determine the nature of the processing and their role (data controllers). The DPO office, where appropriate and when asked, expresses its views and any comments on issues related to the protection of personal data.
- **8.** In collaboration with the General Directorate of Customers, opinions were expressed on the start of the updating of the printed documents used by the above General Directorate, in the context of the Company's transaction with the consumer public. Special terms-clauses were proposed.
- **9.** DPO's contribution to staff training is ongoing. however, and taking into account the current optimizations and the

need to raise the awareness of the Company's employees, the Company's staff has already been trained in targeted training programs (GDPR AWARENESS) related to data processing issues of a personal nature in the performance of their duties. During the training, special emphasis was given to the understanding of the provisions of the General Data Protection Regulation, through examples that were taken into account during the recording that took place during the updating of the Activity File.

The next steps of DPO action, in the work of continuous compliance and upgrading of the existing level, have been designed, always in collaboration with the Company's Management and its continuous and uninterrupted assistance, towards this goal.





#### **E-Government**

EYDAP reaffirms its commitment to the objectives of e-Government. Our targets relate to the use of Information and Communication Technologies (ICT), for the upgrade of services and internal operations so as to secure high quality customer service, through:

- Satisfaction of the customer and of society in general
- Equal opportunities for everyone that transacts with EYDAP
- Transparency in corporate procedures
- Effective management
- Employee satisfaction via active participation
- Minimization of Corporate Environmental Footprint.

The level of **digital services** is constantly upgraded, giving more emphasis on immediate and efficient customer service, through the existing digital networks. More specifically, the Company continued to provide:

- Payment of settlements through external channels
- Electronic notification to customers by e-mail and sms, regarding billing, increased consumption, impending interruption of water supply due to debt, informing the owner of a leased property about the existence of overdue debt of the tenant, etc.,
- Payment via POS to all the counters of the Regional Customer Service Centers.
- 24/7 telephone service through the hotline 1022 that collects dynamic information from consumers, technical departments and regional customer service centers. The hotline provides customer service, updating from the technical services, production of statistics, recording of complaints, updating of third parties. In 2019 the calls to 1022 amounted to 550,000 (200,000 for Technical Services and 350,000 for Customers).

It is worth mentioning that 405,165 calls were on hold to be served for less than 40 ". The number of e-mails to 1022 for 2018 was 24,316, while for 2019 was 41,046.

- Digital service through the website of www.eydap.gr for electronic payment, debt settlements, issuance of electronic bill, etc.
- The "Clicktocall" service, which offers the customer the opportunity to register contact details, to declare an existing problem and the desired time of contact, during which the employee of the telephone center will contact him. The number of requests for 2018 through the clicktocall service was 2,421, while for 2019 was 4,360.
- **Digital payment** using the e-pos of the DIAS Payment System.
- Posting of the water bill and preservation of billing history on the website, in pdf format, available to the registered users.
- Simplification of registration procedures through the taxisnet service as an e-EYDAP user, offering the customer access to aggregated data on his water connection/s, debts, payments,

correspondence with EYDAP etc. While in 2018 the number of registrations amounted to 2,488, in **2019** they increased to 21,944.

• Simplified procedure (from 28.3.2019) for correcting customer data through the taxisnet service and submitting a Settlement request, which simplifies the procedures for serving the requests of the users of the website. Data corrections in 2018 were 5,883, while in 2019 they reached 18,733. The settlement requests were 1,353 in 2018, while in 2019 it was 1,310.

In the context of the Company's philosophy, that the informed customer is the protected customer, a series of videos were created offering guidelines on identifying the property's water meter, on its reading and on detecting a leak. The specific videos are posted on the corporate web-page of EYDAP (www.eydap.gr) as well as on the Company's YouTube channel.



#### **Digital Transformation**

technologies and making digital transformation a strategic choice, aims to enhance its flexibility and efficiency as a source of value creation always for the benefit of all its stakeholders as well as its Sustainable Development.

A reflection of our belief is the creation in April 2019 of a new Digital Transformation organizational unit.

The Company, in the first half of 2019, completed the process of transferring, evaluating and transforming of data using automated, reliable and structured processes while applying operational rules.

In the framework of the formulation of the guidelines for the integrated strategy of EYDAP's information resources digital upgrading, a **comparative study** of the current situation of collection and use of EYDAP's digital data, and of exploiting Machine Learning/Artificial Intelligence techniques of similar companies' good practices was carried out at international level.

The study highlighted the ever-increasing use of modern Machine Learning and AI technologies as a means of optimizing operational processes. We have identified areas of interest and appropriate datasets for the development of relevant algorithms and proceeded to prepare the general guidelines for the introduction of new applications and the integrated utilization of the Company's data.

In the context of formulating an integrated strategy for upgrading the existing information systems of the company, but also to capture the needs that will arise in the coming years, the optimization project in the critical sector of digital transformation of EYDAP was carried out with the help of a specialized consultant with significant experience in infrastructure. The main object was to review the existing architecture of Information Systems and Applications and to identify opportunities for optimizing business processes, in relation to our people, processes, technology and data collection / processing.

The project aims to the digital modernization, rationalization of costs and the improvement of customer service, via upgrading or replacing the existing systems by using modern technologies.

The project includes the recording of current Information Systems and corporate applications, as well as the identification of the pain points in matters of operation and deficiencies of the Systems. In connection to the best international practices, the initiatives and targeted actions required to meet the operational needs of the Company, as well as the treatment of risks related to the Information Systems, will be recognized. In connection with best international practices and performance, initiatives and targeted actions will be identified to meet the Company's operational needs.

Of critical importance to the project is the final proposal for the design, supply and installation of a new integrated information system (ERP) company and the setting of future goals and actions for the Digital Transformation of EYDAP.

Organization Size	2019			2018			
Total number of employees	2,217			2,497			
Total number of business units / activities	3			3			
Operations' Circle (thousands €)	323,744			322,396			
Total capitalization (31/12)	804,075,000			532,500,000			
Assets (thousands €)	1,562,867			1,533,821			
Other assets	2019			2018			
Total assets	803,445	803,445			826,352		
	2019			2018			
Shareholder structure	Shares	Shareholders	%	Shares	Shareholders	%	
Hellenic Corporation of Assets & Participations S.A. share	53,250,001	1	50% +1 share	53,250,001	1	50% +1 share	
HRADF	12,069,739	1	11.33%	12,069,739	1	11.33%	
Legal entities	34,348,356	365	32.25	33,576,383	279	31.53	
Individuals	6,831,904	21,984	6.42	7,603,877	23,470	7.14	
Total	106,500,000		100,00%			100,00%	

#### BASIC DATA ON EYDAP S.A. SHARE FOR 2019

Number of Shares = 106,500,000

Share Price at the end of the year / period = 7.55€

Capitalization at the end of the year / period = 804,075,000

Earnings after taxes / share (€) = 58.1 million €

Dividend for the year 2019

(proposed at the General Meeting of Shareholders) = 0.38 €

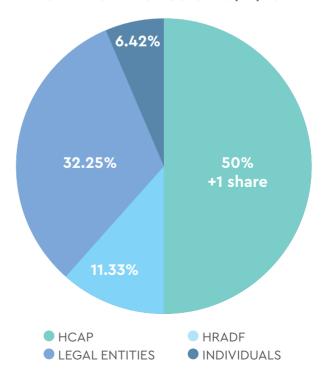
Dividend yield (price 31/12/2019) = 5%

Earnings per share 0.55€

EBITDA 107.7 mil. €

EBIT 70.6 mil. €

#### **SHAREHOLDER STRUCTURE 31/12/2019**





GRI 102-16, GRI 102-18

### 1.2 Corporate Governance

EYDAP is committed to apply Corporate Governance principles throughout its activities. Along these lines, the Company approaches decision-making policies through business ethics and pledges to uphold the interests of its shareholders and all other related parties. EYDAP is based on the corresponding national legislation, the provisions and the regulations, the international advances as well as its own corporate values that promote the recognition and reputation of the Company.

EYDAP, following the provisions of institutional framework, initially drafted the Code of Corporate Governance based on the legislation in force. The Code facilitates the formulation of policies and practices of corporate governance according to the specific needs of the Company. Then a single text of the Internal Regulations of Corporate Governance and Operation was drafted, which achieves the effective diffusion of a common operational practice. The revised and updated text of the Regulation is clearly structured to present information relating to Corporate Governance, the internal audit system, the assessment and management of operational risks, the organizational structure of the Company and also to the corporate social responsibility as a key operating factor. The goal of this Regulation is to promote good governance, in belief that it will enhance the EYDAP's long-term success and competitiveness.

The implementation of the Regulation is considered by both the Company and the Shareholders as a procedure that adds corporate value and not as mere compliance with the law.

The Company focuses on the effective monitoring and management of potential risks, in order to maintain the stability and continuity of its works.

As for the established procedures, the Company puts a special emphasis on the enhancement of transparency, applying the relevant procedures as derived by the current institutional framework.

The Corporate Governance Statement concerns the set of principles and practices adopted by the Company in order to ensure its performance, the interests of its shareholders and the interests of all interested parties.

It is pointed out that it is drafted based on the current article 152 of law 4548/2018.

The structure of EYDAP's Corporate Governance Statement focuses on the following issues:

- i. Corporate Governance Code Internal Regulations
- ii. Board of Directors and Audit Committee
- iii. General Meeting & Shareholders' Rights
- iv. Internal Audit and Risk Management
- v. Other management and supervisory bodies or committees of the Company

The Corporate Governance statement, the operation of the internal audit system and the explanatory report are available in the Annual Financial Report of the Board of Directors which is posted on the corporate website www.eydap.gr. Also posted on the website but also available at the offices of the Share Registry and Corporate Announcements Service, at the Company's headquarters, 156 Oropou, Galatsi, is the Corporate Governance Statement – Regulations of Internal Operation.

Regarding the implementation of Corporate Governance in the Company, we briefly mention the following:

#### **Board of Directors**

The Board of Directors is the supreme governing body of the Company, with its main responsibility being the formulation of its strategy and policy development. In general, the Board of Directors takes decisions to facilitate the realization of corporate goals, while monitoring the progress and implementation of the Company's activities. Excluded are those matters which according to the Provisions of the law or the Articles of Association of the Company and fall under the exclusive competence of the General Meeting. The Board of Directors of the Company is elected by the General Meeting of Shareholders and has a five-year term. Of the thirteen members of the Board of Directors, two are executive – the Chief Executive Officer and one more Member – while the eleven members are non-executive. It is noted that in addition to the representatives of the majority shareholders, elected by the General Meeting, the Board of Directors consists of two members representing the employees of the Company as well as two members representing the minority shareholders. In the year 2019 there were three independent non-executive members on the Board. EYDAP S.A. in accordance with the legislation on Corporate Governance, the relevant European directives and the Greek Code of Corporate Governance for Listed Companies and with a view to ensuring the objectivity of the decisions of the supreme Management body meets the criteria of objectivity Executive members of the Board of Directors:



#### **General Meeting of Shareholders**

The General Meeting of Shareholders of the Company is the supreme body of the Company, being entitled to decide on any matter in connection with the Company. Its legal decisions also bind the shareholders who were absent or disagreed. The General Meeting of Shareholders is convened by the Board of Directors and meets regularly at the headquarters of the Company, at least once a year.

Each share entitles one vote to the General Meeting. The General Meeting is in quorum and validly deliberates on the items on the agenda, if at least fifty percent (51%) of the paid-up share capital is represented.

#### **Shareholders**

The General Meeting of Shareholders of the Company is the supreme body of the Company, being entitled to decide on any matter in connection with the Company. The General Meeting of Shareholders is convened by the Board of Directors at least once a year. Apart from established procedures that ensure transparency, EYDAP has adopted a number of other practices that enhance dissemination of information to shareholders and investors.

#### **Control Mechanisms**

# Internal Audit System & Risk Management

The internal audit system of EYDAP S.A. is a set of processes, policies, principles, regulations, safeguards and organizational structures that are designed to provide reasonable assurance as to the accuracy and reliability of accounting and operational data, the protection and efficient use of Company's resources, the achievement of strategic objectives and the overall efficiency and performance of all operations.

The Board of Directors of the Company shapes the Company's vision and strategic objectives and has the overall monitoring of the effectiveness of the Internal Audit System. Company Managers (General Managers, Assistant General Managers, Deputy Managers) are responsible for the design, implementation, management, on-going control and continuous assessment of the operational procedures, the risk management processes and the safequards. All employees are responsible for the implementation of the internal control system in their area of responsibility. The internal and external auditors are responsible for providing reasonable assurance to the Board of Directors regarding the adequacy and effectiveness of the Company's internal audit system.

The establishment of a **risk management committee** is under consideration and will be fully put into operation in 2020.

In 2019 there was an update of crisis management manual. A new crisis management committee was appointed and trained.

#### • BoD Audit Committee

In the framework of the Corporate Governance of the Company, the evaluation of the Internal Audit System and the implementation of the Decisions of the Supervisory Authorities, the Company has established an Audit Committee, which consists of at least three (3) non-executive members of the Board of Directors. Appointed by the General Meeting of Company's Shareholders and operates in accordance with the provisions of 3016/2002 Law and 4449/2017 Law and approved by the Operations Regulation of the Board of Directors (decision of BoD 191412/8-11-2017) which specified the purpose, the jurisdiction, the election process, the composition, the powers and responsibilities.

#### • Internal Audit

The internal audit of the Company is exercised by the Internal Audit Division. An independent organizational unit reporting directly to the Company's Board of Directors. The Internal Audit

#### **Administration**

Division is supervised by the Audit
Committee of the Board of Directors and provides advisory and trust services.
It operates in accordance with the applicable Greek legislation, the Rules of Procedure approved by the Board of Directors, the International Auditing
Standards for the professional implementation of the Internal Audit of the Institute of Internal Auditors as well as the ethical rules dictated by the basic principles of auditing.

The correctors and follows:

Konstal Ioannis
Georgi
Nikolac
Michail

The Internal Audit Division aims to assist the Management, the Board of Directors, the Company's executives and employees in general so as to perform their tasks more efficiently and to achieve the company's objectives by evaluating the operation of the internal control systems, risk management and corporate governance practices through audits and advisory services.

# External Audit of the Company by statutory auditor

More information on Corporate Governance is available on the Company's website www.eydap.gr and in the Annual Report of the Board of Directors, which accompanies the financial statements, which is also posted on the corporate website

Division is supervised by the Audit The composition of the Board of Directors from **01.01.2019 to 26.06.2019** was as Committee of the Board of Directors and follows:

Konstantinos Papadopoulos	Chairman of the BoD , Non-Executive Member
Ioannis Benisis	Chief Executive Officer, Executive Member
Konstantinos Vafeiadis	Executive Member
Ioannis Kardaras	Non-Executive Member
Georgios Makrinos	Non-Executive Member
Nikolaos Sarantis	Non-Executive Member
Michail Stavroulakis	Independent, Non-Executive Member
Alexandros Pouliasis	Independent, Non-Executive Member
Georgios Chalabalakis	Non-Executive Member
Panagiotis Skoularikis	Non-Executive Member
Emmanuel Aggelakis	Non-Executive Member
Georgios Alexandrakis	Non-Executive Member

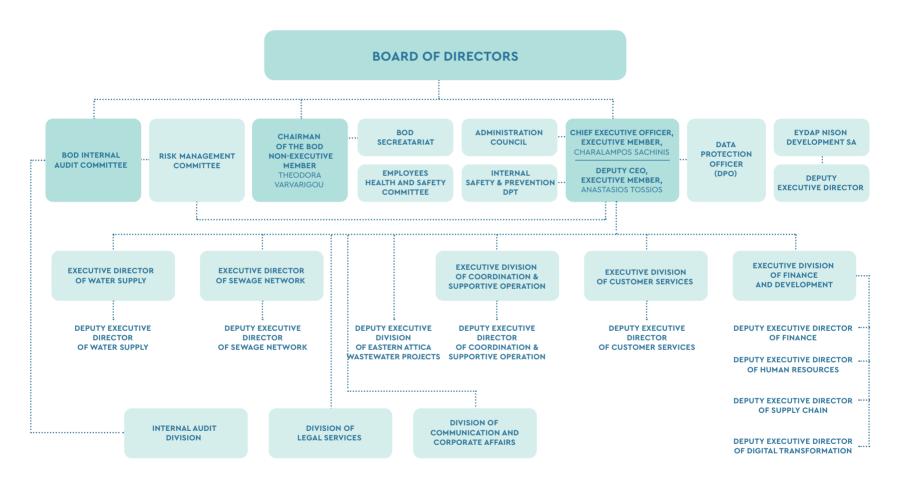
The composition of the Board of Directors from **27.06.2019 to 04.09.2019** was as follows:

Theodora Varvarigou	Chairman of the BoD , Non-Executive Member
Charalampos Sachinis	Chief Executive Officer, Executive Member
Anastasios Tossios	Deputy CEO, Executive Member
Aikaterini K. Beritsi	Independent Non-Executive Member
Alexander Nassuphis	Independent Non-Executive Member
Michail Stavroulakis	Independent Non-Executive Member
Angelos Amditis	Non-Executive Member
Demetrios G. Konstantakopoulos	Non-Executive Member
Alexandros Pouliasis	Independent, Non-Executive Member
Christos Mistriotis	Non-Executive Member
Emmanuel Aggelakis	Non-Executive Member
Georgios Alexandrakis	Non-Executive Member

The CVs of the Members of the Board of Directors are posted on the Company's website www.eydap.gr



The operation of the Company in 2019 was based, in addition to the Board of Directors, on 5 General Divisions, which are served by executives of the Company with many years of experience and dedication to their work.



On September 4, 2019, the Board of Directors appointed the Managing Director and Executive Member of the Board, Mr. Anastasios Tosios, as Deputy CEO of the Company.

# On 17.4.2019 by Decision of the Board of Directors of EYDAP there was a modification of the Organization Chart of the Company with:

A) abolition of the Executive Division of Finance and the Executive Division of Human Resources and the creation of the new Executive Division of Finance and Development, which reports administratively and operationally to the CEO of EYDAP S.A. This Executive Division is headed by a General Manager who is assisted in his work by four (4) Deputy Executive Directors:

- Deputy Executive Director of Finance, under whose responsibility will be the Division of Financial Services and the Division of Financial Analysis.
- Deputy Executive Director of Human Resources, under whose responsibility will be the Division of Human Resources and the Division of Training and Development of Human Resources.
- Deputy Executive Director of the Supply Chain, under whose responsibility the Procurement Division and the Warehousing and Transportation Division will be located.
- Deputy Executive Director of Digital Transformation, under whose responsibility will be the Divisions of Digital Administrative Information and Division of Informatics.
- B) Abolition of one (1) of the two (2) positions directly responsible to the CEO of EYDAP SA as Deputy Executive Director. The CEO is assisted in his work

by one (1) Deputy Executive Director in charge of the East Attica Works Division.

C) Inclusion of the Division of Facility Security and Administrative Support of Emergency Political Planning (PSEA) in the Executive Division of Coordination & Supportive Operation.

#### **Basic Committees and Boards**

- Board of Internal Audit Committee
- Commission for the Health & Safety of the Employees
- Committees for the Procurement and Execution Procedures of Public Contracts
- Committees for the Award of State Contracts, Studies or the Provision of Technical and Other Relative Scientific Services and Projects with Study Evaluation
- Committees for the Inspection and Reception of Public Contracts for Supplies and General Services
- Committees for the Award of Public Contracts for Supplies and General Services
- Committees for the Evaluation of Objections and Appeals
- Committee for the Compensation of Third Parties
- Commission for the Upgrade of Services
   & Management of Customers' Requests
- Commission of e-Governance & Digital Information Technology
- Commission for the Assessment of Debt Settlement Requests
- Medical Council

- Administrative Board
- Promotion Council: A' Council, B' Council
- Disciplinary Board: First Level Board, Secondary Board
- Management Board
- Technical Board

#### In 2019 was established the:

#### • Remuneration Committee

On the 4th.9.2019 the Remuneration Committee was established by a decision of the Board of Directors and operates as an independent and objective body which assists in a transparent manner the Company's Board of Directors in matters relating to the remuneration of the Chairman of the Board of Directors, as well as -legal and non-executive Members in accordance with applicable law. The operating regulations of the Remuneration Committee (decision of the Board of Directors 20411 / 6.11.2019) are posted on the Company's website www.eydap.gr.

### • Committee on Innovation and Digital Transformation

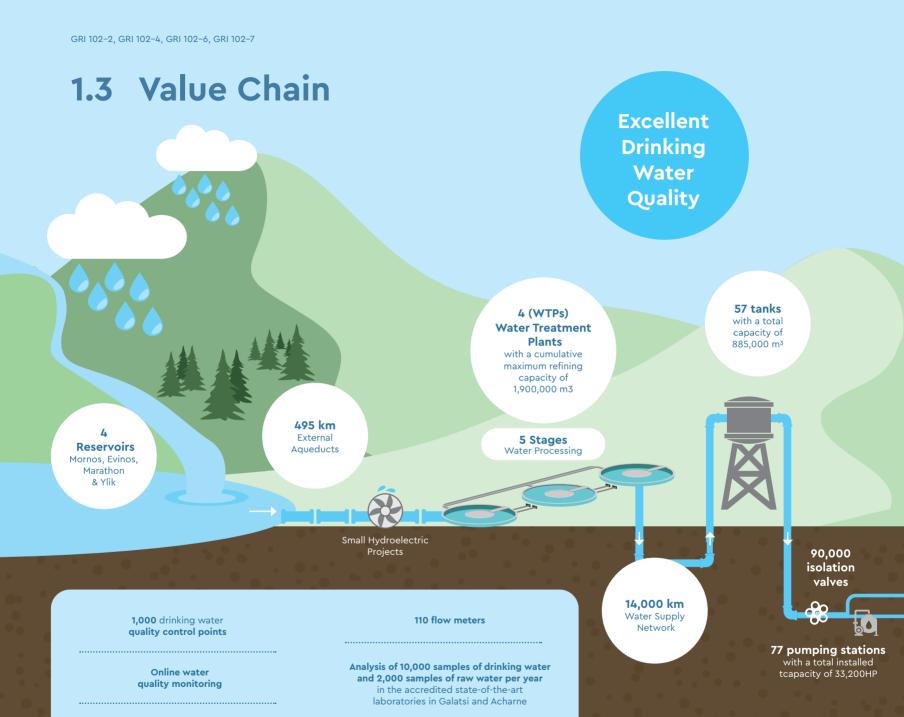
The Committee on Innovation and Digital Transformation was established on the 4th.12.2019 with a Decision of the Board of Directors with the aim of informing, analyzing, evaluating, and supporting the management on issues related to new technologies and innovations, including the Company's digital transformation. The Commission is governed by a relevant Regulation.



1246 data recording and telecommunication points (SMS) and (GPRS)

100 monitoring points with

Remote Control - Telemetry system (Scada)



24/7 drinking and raw water quality controls 365 days a year at Accredited Water Quality

**Control Laboratories** 

#### **WATER SUPPLY**



4,400,000 residents

1,050,310 m<sup>3</sup> of drinking water/daily



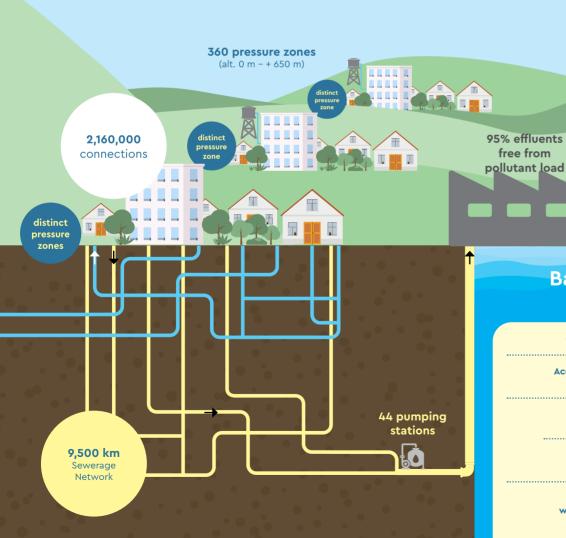
#### **SEWAGE SYSTEM & EFFLUENT TREATMENT**



3,975,000 residents

755,500 m<sup>3</sup> of effluent

daily processed at WWTP's



#### 3 WasteWater **Treatment Plants**

Psyttalia - Metamorphosis -Thriassion

**New WasteWater Treatment Plants in Eastern Attica** with the reuse of processed outflows

#### **Back to the Environment** Clean

Quality control of inputs and outputs in WWTPs

Accredited laboratories for sewage chemical analysis 12,000 effluent samples - 66,000 analyses/year

**Monitoring of Liquid Industrial Waste** 

Monitoring of industrial effluents connected to the sewerage network

Monitoring the operation of pumping stations with Remote Control - Telemetry systems (SCADA) GRI 102-9, GRI 102-10, GRI 102-11

# 1.4 Supply Chain

For EYDAP, the management of the Supply Chain, as a critical sector of Sustainable Development, is directly linked to ensuring transparent procedures for the supply of materials, services, systems and information.

The main goal of EYDAP is to achieve its mission to provide excellent quality and affordable drinking water and its return to the environment clean, through modern procedures.

The coverage of the needs of EYDAP both in goods and services, is done both by the domestic and the international market and in full harmonization with the National Legal Framework on Public Procurement as defined by law 4412/16, as amended and in force (Government Gazette A' 147 / 08–08–2016), the Public Procurement of Works, Procurement and Services (adaptation to the Directives 2014/24 / EU and 2014/25 / EU), and the secondary institutional framework.

In the context of achieving this goal, the Supply Chain Management, through a specialized external consultant in matters of Procurement, implemented the project of optimization of its structures and procedures and the drafting of a new flexible Procurement Regulation for contracts under the limits, following the developments and the requirements of modern management, in order to achieve its modernization, the development of new models of procurement and inventory management and consequently, the maximum possible increase of the business efficiency and the added value of the Company.

With the optimization project which started in 2019, the Supply Chain Division guarantees the strict observance of the fundamental principles governing public procurement and especially the principles of equal treatment of suppliers, the development of adequate competition with the participation of the largest number of participants, sound management, as well as the transparent and optimal management of the resources available.

In the same context of optimization of corporate processes, a specialized consultant prepared a "Diagnostic study of the operation of the Financial Management and Support of Budget Preparation and Monitoring", with the aim of extracting financial results as quickly as possible and restructuring the budget procedures. The object of the project was the examination of the operating procedures of the Financial Management at an accounting level and the provision of an appropriate methodology for the organization of its operations in order to achieve the goal of the fastest closing month taking into account the best market practices. The budget restructuring process focuses on budget preparation procedures and the allocation of funds.

The proposals for the two projects were adopted immediately as the closing time of the three-month period was improved by about twelve days and the most efficient data processing for the reliability and completeness of the budget figures was improved.

EYDAP, in tenders of high importance and economical value, conducts tenders published at European level, in order to ensure the participation of important suppliers operating both domestically and in Europe, thus ensuring the development of healthy competition, which leads to the achievement of a significant financial benefit for the Company. Recent examples are the largest tendering procedures for the Operation and Maintenance of the **Psyttalia Wastewater Treatment Plant** and the provision of postal services for the collection, transport, sorting and distribution of postal shipments of EYDAP SA, in which domestic and foreign corporate schemes participated, with a strong presence in the field in which they operate, from the participation of which EYDAP expects to reap benefits.

The purpose and goal of EYDAP is to manage its needs in a way:

- timely,
- of quality, according to each case quality requirements, as described in the individual technical specifications and
- economical, in accordance with the best financial terms (costs, payment terms, guarantees, etc.) for all parties

The tender procedures carried out by EYDAP are strictly defined by law without any further scope for action.

The Company, recognizing the potential risks from the non-implementation of Law 4412/2016 and its continuous amendments, has responsibly taken a series of actions aimed at their timely and effective response.

The main possible risk concerns the adaptation of internal procedures to the continuous amendments of the provisions of Law 4412/2016. EYDAP with the aim of the immediate and universal application of both the existing terms and any amendments to the institutional Framework of Public Procurement, acts preventively with continuous training of the executives involved in all areas of its activity, through specialized seminars.



The purpose of the company is its full and timely compliance with regulatory procedures, always with emphasis on transparency and ethical integrity.

In **2019**, 279 people attended training seminars on the proper implementation of Law 4412/2016.

The legal and contractual obligations, as well as the ethical principles that govern the operation of EYDAP require the observance of the confidentiality of sensitive information concerning the Company and its suppliers / service providers, in accordance with the provisions of the relevant law "on Privacy".

In accordance with these principles, EYDAP executives directly or indirectly involved in tendering procedures are prohibited from disclosing information to suppliers/service providers, from contacting participating suppliers/ service providers prior to final award (except in the case of clarifications relating to tendering procedures), while respecting the principles of equal treatment and non-circumvention of competition. In particular, the list of potential suppliers/ service providers, the prices offered, the terms of payment, etc. are considered confidential information and are not disclosed to third parties.

Aparallel and equally serious risk concerns the level of compliance of the cooperating suppliers/ service providers with the requirements of Law 4412/2016. EYDAP makes sure, through the required clarifications and with the appropriate technical guidance, to ensure the proper participation of the suppliers / service providers in the tender procedures. Existing and potential suppliers must follow the correct procedures and also ensure compliance with potential risk management, in all areas covered by the code of conduct in accordance with the requirements of the laws and regulations governing their operation.

In 2019, no acts or omissions were reported that raise regulatory compliance risks and there were no incidents of non-compliance.

In 2019, 550 contracts were signed between EYDAP and suppliers / service providers, with a total value of approximately 31.64 million euros. Of these contracts, 64 relate to Procurements and 486 to Services.

The company places special emphasis on attracting new economic entities through the posting of the Announcements:

- in the Electronic Online Repository of Administrative Transactions (DiAVGEiA)
- in the Central Electronic Register of Public Procurement (KEMDeS)
- in the National System of Electronic Public Procurement (ESEDeS)
- in the Annex to the Publications of the Declarations of the Official Journal of the European Union

 on the website of EYDAP SA (http:// www.eydap.gr) in the section COMPE-TITIONS, PROCUREMENT ANNOUNCE-MENTS.

The tender procedure is carried out according to strict rules and includes: the announcement of the tender, the establishment of commonly accepted Technical Specifications, the nomination of the bidder based on award criteria and the signing of the relevant Contract.

EYDAP **concludes public contracts** with our suppliers taking into account:

- the suitability to exercise their professional activity,
- their economic and financial adequacy,
- their technical and professional ability,
- their compliance with quality assurance and environmental management standards,
- their compliance with the provisions of the legislation on health and safety of workers, and their obligations in the areas of social security and labor law.

With regard to **long-term agreements**, we emphasize that they are **compatible** with the principles of free competition subject to the following conditions:

- they have been concluded following competitive procedures,
- the technical specifications of the products or services are clear and detailed,
- be governed by the mutual obligations and rights of the parties and be checked periodically to see if they remain competitive.

The suppliers of materials, equipment and service providers who are selected as partners of EYDAP, during the implementation of their contractual obligations and in application of the National and EU Framework must:

- comply with national and EU laws, decrees & regulations,
- comply with their contractual obligations,
- fulfill all their legal obligations for the Health & Safety of their employees and their subcontractors.
- adhere to environmental legislation,
- refrain from any action that could be interpreted as bribery or an act of corruption or fraud
- ensure the security and confidentiality of information.

The systematic monitoring of the execution of the Contracts is done by the competent Monitoring & Acceptance Committees. In case of non-compliance with the terms, then according to the law the Committees may:

- declare the Supplier / Service
   Provider exempt
- discard the supplied material
- impose penalty clauses

In 2019, regarding the observance of the current legislation by the suppliers / service providers, there was only one case of breach of contract (due to inability to deliver where one supplier company was declared insolvent and a letter of guarantee was forfeited). There were no other cases of recidivism, breach of

obligations or violation of labor and insurance legislation and, consequently, termination and forced termination of the contract.

In 2019, there were no cases of violation of the provisions concerning:

- child labor,
- forced labor,
- participation in a criminal organization,
- bribery, corruption,
- fraud.
- committing terrorist crimes or more generally committing crimes related to terrorist organizations,
- money laundering by suppliers
- environmental legislation, climate change

The exclusion of suppliers / service providers, against whom an irrevocable court decision has been issued, for any of the above categories is provided by the existing legislation.

EYDAP in full implementation of the Policy for the **Fight against Corruption and Bribery** applies zero tolerance and is committed to operate with professionalism, legality and integrity in all its professional transactions.

EYDAP, by incorporating in the Contracts the conditions for the compliance of the Suppliers / Service Providers with the Principles of the UN Global Compact, in the fields of Human Rights, Labor, Environment and Corruption, ensures that all Providers Supply Chain Services, implement practices that promote respect for human rights and are in line with the company's policies on social, labour and environmental issues.



GRI 102-12, GRI 102-13

# 1.5 Participations and Recognition

EYDAP, as the largest company in Greece that is active in the provision of water supply, sewerage and wastewater treatment services, is a member of Greek, European and International Associations that promote international cooperation and monitor developments related to sustainable water management.

#### Aqua Publica Europea (APE).

APE is an international non-profit association, its members are exclusively public providers, whose sole purpose is to address water governance issues and related policy issues from the point of view of public administration. Aqua Publica Europea (APE) was founded in 2009 with the aim of promoting and strengthening public water and sewer management at European and international level. The association facilitates and enhances the exchange of know-how and the implementation of joint projects between its members. The aim of the cooperation is to formulate international policy in these areas by promoting dialogue between public providers, the business sector, academia and various international organizations.

EYDAP is a member of Aqua Publica Europea (APE) since January 2017 which is the exclusive association of all public and municipal water and sewerage providers in Europe whose members are the largest companies, such as Eau de Paris, Vivaqua of Belgium, CAP Milan etc.

#### **MEMBER**

- Union of Listed Companies
- Association of SA & Limited Liability Companies
- AQUA PUBLICA EUROPEA
- Technical Chamber of Greece (TCG)
- American-Hellenic Chamber of Commerce
- Hellenic Advertisers Association (SDE)
- Hellenic Institute of Entrepreneurship & Sustainable Development (EIEAA)
- Hellenic Customer Service Institute
- Hellenic Management Association
- Global Water Operators' Partnership Alliance, UN Habitat
- CSR HELLAS
- GRFFN ANGFLS

#### **PARTICIPATION**

- European Benchmarking Cooperation
   (EBC) for the creation of indexes (KPIs).
- National Consumer and Market Council (ESKA)

#### **Awards and Distinctions**

EYDAP's Digital Information Management Department won three awards at **the Impact Business IT Excellence Awards 2019** in a ceremony held on May 28, 2019.

Gold Award
in the category
"Continuous Business
Improvement"
for the project
of Administrative
Modernization

Silver Award
in the
"Systems Integration"
category

Bronze Award
in the "Big Data"
category for the
Digital Governance
project

The Gold Award was given to the Internal Audit Division
at the Responsible Management Excellence Awards of EBEN GR, for its outstanding performance in the principles
of business ethics and the model of responsible management it follows.



EYDAP remains the only company in the wider Public Sector, which holds the internationally recognized RME MODEL certification and is awarded for the second consecutive year by the organization.





# Strategy for Sustainable Development



# 2.1 Dialogue with the Stakeholders

EYDAP recognizes as stakeholders, the entities or people who might possibly be affected by its activities, or those who might possibly affect the ability of the Company to implement its strategy and accomplish its goals. The following table includes information on the stakeholders of the Company, the methods and frequency of consultation, as well as their topics of interest. The way the Company responds to the material aspects of its stakeholders, as these derive from a relevant survey in early 2017, is reflected upon the corresponding chapters of the current Sustainable Development Report.

Stakeholders	Communication and Consultation Methods	Frequency of Consultations	Relevant Topics *
Employees and Workers' Unions	Personal Contact (meetings, phone calls and visits in the areas of interest) E-mail Correspondence Internet	Daily     Annually     As Appropriate	Employment Training & Education Employee's Health & Safety Human Rights in the Workplace Internal Communication Diversity & Equal Opportunities Indirect Economic & Social Impact Raising Environmental Awareness & Sensitivity Consultation & Cooperation with the Local and Wider Society Direct Economic Impact Affordable Pricing Anti-Corruption Responsible Supply Chain Consumer Health & Safety – Water Quality (Water Supply) Access to Clean Water, Sustainability of Water Resources, Network Coverage (Water supply) Reliable Network & Water Efficiency (Water Supply) Consumer Health & Safety (Sewerage System) Informing Consumers Precautionary Measures for Emergency Situations Protection and Saving Water (Circular Economy) Solid Waste Management (Circular Economy) Protection of the Marine Environment (Wastewater Management) Environmental Compliance
Clients/ Consumers	1022     Personal Contact (meetings, phone calls and visits in the areas of interest)     Written Communication     E-mail     Company's Website     Informative Events     Informative Text-Messages     Social Media	Daily     As Appropriate	Consumer Health & Safety – Water Quality (Water Supply)  Access to Clean Water, Sustainability of Water Resources, Network Coverage (Water supply)  Consumer Health & Safety (Sewerage System)  Reliable Network and Water Efficiency (Water Supply)  Affordable Pricing  Anti-Corruption
Business Associations and Bodies	Personal Contact (meetings, phone calls and visits in the areas of interest) E-mail Written Communication Conferences / Seminars Research	• As Appropriate	Workers' Health and Safety     Employment     Diversity and Equal Opportunities     Human Rights in the Workplace     Internal Communication     Training and Education

Stakeholders	Communication and Consultation Methods	Frequency of Consultations	Relevant Topics *
Suppliers and Contractors	Personal Contact (meetings, phone calls and visits in the areas of interest F-mail Written Communication Announcements/Proclamations	• Daily • As Appropriate	Consumer Health and Safety – Water Quality (Water Supply) Access to Clean Water, Sustainability of Water Resources, Network Coverage (Water supply) Anti-Corruption Reliable Network & Water Efficiency (Water Supply) Consumer Health & Safety (Sewerage System) Debt Repayment
Local Communities/ Local Governance	1022     Personal Contact (meetings, phone calls and visits in the areas of interest)     Written Communication     E-mail     Conferences	• Daily • As Appropriate	Reliable Network & Water Efficiency (Water Supply) Consumer Health and Safety - Water Quality (Water Supply) Consumer Health and Safety (Sewerage) Climate Change Solid Waste Management (Circular Economy) Environmental Compliance
Wider Society (Mass Media / Journalists)	Entries in Daily Newspapers     Contact Form     Social Media	Daily     Weekly     As Appropriate	Consumer Health and Safety – Water Quality (Water Supply) Affordable Pricing Access to Clean Water, Sustainability of Water Resources, Network Coverage (Water supply) Consumer Health & Safety (Sewerage System) Protection and Saving Water (Circular Economy) Reliable Network & Water Efficiency (Water Supply)
Non-Governmental Organizations (NGO's)	Personal Contact (meetings, phone calls and visits in the areas of interest) E-mail Written Communication Conferences/Events	• As Appropriate	Access to Clean Water, Sustainability of Water Resources, Network Coverage (Water supply) Reliable Network & Water Efficiency (Water Supply) Environmental Compliance Indirect Economic and Social Impact Raising Environmental Awareness & Sensitivity Licensing and Regulatory Compliance Anti-Corruption Consumer Health & Safety – Water Quality (Water Supply) Protection and Saving Water (Circular Economy) Solid Waste Management (Circular Economy) Protection of the Marine Environment (Wastewater Management)
State and Regulatory Authorities	Personal Contact (meetings, phone calls and visits in the areas of interest F-mail Written Communication Conferences/Events	• Regularly • As Appropriate	Consumer Health and Safety - Water Quality (Water Supply) Access to Clean Water, Sustainability of Water Resources, Network Coverage (Water supply) Reliable Network & Water Efficiency (Water Supply) Consumer Health & Safety (Sewerage System) Informing Consumers Climate Change Protection and Saving Water (Circular Economy) Solid Waste Management (Circular Economy) Protection of the Marine Environment (Wastewater Management) Environmental Compliance
Academic Community	Personal Contact (meetings, phone calls and visits in the areas of interest) F-mail Written Communication Research Programs Educational Programs	Upon request     Regularly     Annually in     summer     As Appropriate	Consumer Health and Safety – Water Quality (Water Supply) Consumer Health and Safety (Sewerage System) Anti-Corruption Access to Clean Water, Sustainability of Water Resources, Network Coverage (Water supply) Reliable Network and Water Efficiency (Water Supply) Debt Repayment Informing Consumers Precautionary Measures for Emergency Situations
Shareholders and Investor Community	<ul> <li>Personal Contact (meetings, phone calls and visits in the areas of interest</li> <li>E-mail</li> <li>Written Communication</li> <li>General Meetings</li> </ul>	Regularly     As Appropriate	Direct Economic Impact     Licensing and Regulatory Compliance     Business Strategy     Privatization of EYDAP     Agreement with the Greek State     R & D

<sup>\*</sup> Listed above are the first 6 relevant topics per stakeholder group. In case of equal merit all topics are presented.



GRI 102-46, GRI 102-47



# 2.2 Analysis of Material Topics of Sustainable Development

In early 2017, EYDAP carried out a materiality analysis with the participation of internal and external stakeholders, aiming to define the material issues of sustainable development and consequently the contents of the 2016 Report and of the one of 2017.

Material Topics are those that reflect the major economic, environmental and social impact of the Company or those that influence considerably the evaluation and decisions of its stakeholders.

EYDAP will use this materiality analysis for the revision and improvement of its wider strategy for sustainable development. The analysis was carried out for the first time according to the International Standards of GRI Sustainability Reports. The methodology of materiality analysis on issues of sustainable development is presented below.

#### 1st Phase: Recognition of related topics

In the first phase of analysis, EYDAP took into consideration the GRI Principles of Stakeholder Engagement and Sustainability Context and recognized topics relevant to its activities and stakeholders. The results were based on an overview of the following:

- The Company's Annual Report for 2015, 2016 and 2017.
- Internal documents regarding policies, procedures, strategies and results of consultations with the stakeholders.
- Publications in 2016 2017 concerning the activities of EYDAP
- UN's 17 Global Goals for Sustainable Development
- Sustainable Development Reports of like foreign companies
- High international standards and sustainability guidelines

#### 2nd Phase: Prioritization of Topics

In the second phase, EYDAP carried out a materiality analysis, topics that reflect its major economic, social and environmental impact according to the new GRI Standards and the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development. These constituted the reference framework for the prioritization of EYDAP's topics regarding their influence on the Sustainable Development, taking always into account the GRI Principles of Stakeholders Engagement and Sustainability Context.

In particular, the Company took into consideration the new GRI Standards according to which materiality is the principle that defines which relevant topics are significant to report on. The topics recognized in the first Phase were prioritized according to the following criteria:

- The importance of their impact on the UN's 17 Sustainable Development Goals
- The importance of their impact on the business model, the reputation and the ability of EYDAP to reach its goals
- The extent to which they influence the judgment and decisions of EYDAP's stakeholders

For the first two criteria, the Company organized a special workshop with the participation of the Executive Directors. The results depicted on the horizontal axis of the following diagram were based on these first two criteria.

For the last criterion, EYDAP conducted a digital research with its stakeholders on a random sample of 820 representatives of the stakeholders. The results improved the qualitative analysis of material aspects and contributed to a deeper understanding of the expectations and concerns of the participating groups. The analysis results are presented on the materiality map that follows.

#### 3rd Phase: Validation of the Results

In the third Phase of the analysis, the results of prioritization were validated by Senior Management. During the process, the GRI Principle of Completeness and Stakeholder Engagement were taken into consideration.

As a result of this analysis, 10 topics were defined and selected to be included in the 2016,2017 & 2018 Reports, shown in the following table along with their boundaries.

These material issues of sustainable development are further analyzed in the sub-chapters of the Reports.

The materiality map that follows presents the 28 relevant topics of sustainable development prioritized according to the materiality analysis.



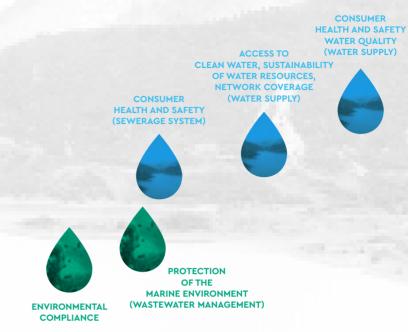
### **EYDAP's Materiality Map**

**SOLID WASTE MANAGEMENT** (CIRCULAR ECONOMY)



RELIABLE NETWORK AND WATER EFFICIENCY (WATER SUPPLY)









**HEALTH AND SAFETY** 









#### **Sustainable Development Goals**

On January 1 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development were officially put into effect. The SDGs were adopted by the world leaders in September 2015 at a UN Summit of historical importance. Through these new Goals, applicable to all for the next fifteen years, the countries shall make an effort to eliminate every form of poverty, fight against inequality and climate change, while ensuring that no one is left on the sidelines.

These 17 Goals were the reference framework for the prioritization of the topics of EYDAP regarding their impact on Sustainable Development.











































Creating Value for the Market

# **Water Supply** Network

**EXTERNAL AQUEDUCTS** MAIN WATER SUPPLY SYSTEM **SECONDARY WATER SUPPLY SYSTEM** WATER TREATMENT PLANT (WTP) WATER TANKS IN OPERATION **SMALL HYDROELECTRIC PROJECTS RESERVOIR** 



77 pumping stations 100 Scada 1,246 of accumulative tracking points 1,246 data record and teletransmition

(SMS & GPRS)

installed force

1,000

drinking water

quality control points

2.160.000 Water Connections data record and tanks total tonnage teletransmition points (SMS)

KIRPHI ECW

Quality Analysis of 10,000 drinking water samples and 2,000 raw water samples in accredited cutting-edge laboratories at Galatsi and Acharnes



# 3.1 Access to Clean Water, Sutainability of Water Resources & Water Supply Network Coverage

GRI 103-1







#### Why is it material?

EYDAP, in order to ensure reasonable levels of water consumption by its customers and meet the obligations of water supply services, is supplied with the required raw water entirely by the Greek State at the entrance of its Water Treatment Plants (WTP). The only exception is the Mavrosouvala's boreholes, which are EYDAP's property. The Company, manages water as a valuable natural resource and a vital good for the residents of Attica (and other areas as well).

In the Water Treatment Plants raw water is rendered potable with the use of the most environmentally friendly methods with respect to the natural resources.

The constant safeguarding of the necessary water resources, the reassurance of the adequate water treatment so as to produce drinking water of the highest quality and the ability to distribute it to the customers via its water network, constitute the main activity of EYDAP.

# 1,050,310 m<sup>3</sup> average daily distribution of drinking water in 2019

to EYDAP area of competence, to certain islands in the South Aegean Region (Cyclades) and the Argosaronic (municipality of Aegina and Agistri), from specific water meters with the use of water tankers, but also to cruise ships and boats at various ports of Attica etc.

Beyond doubt, any malfunction with a negative impact on the quantitative safeguarding of water resources or transfer and distribution of water (external Aqueduct System - header feeding System of drinking water etc) will significantly affect our customers (lack of water) and the Company itself (damage to its public image, reduction of revenues etc.) in proportion to the problem extent. Management of the issue with utmost responsibility contributes to the implementation of the 6th Global Goal for Sustainable Development, as this has been defined by the United Nations.

According to law 2744/1999 and the 20-year contract (valid from 25.10.1999) between the Greek State and EYDAP, which resulted in the application of this law, the Greek State retains responsibility for the exploration and the collection of raw water, as well as for the construction of the necessary works, in order to supply the necessary quantities of raw water to EYDAP. The Company, for its part, has the exclusive responsibility - a non-transferable right - for the treatment of this water, its distribution, as well as the operation and maintenance of the water supply network, in order to meet qualitatively and quantitatively the needs of all consumers without distinction in its area of responsibility.

With the same above-mentioned Contract, EYDAP has undertaken (for a price) the operation and maintenance of all facilities for the collection and transport of untreated water, which are owned by the Greek State, as well as the preparation of studies for projects, which ensure the safety of the facilities and the alternative water supply of the WTP's in case of failure. In this way it is able to control, primarily and thoroughly, the technical projects for the transfer of untreated water from the springs to the Water Treatment Plants.

Consultations for the conclusion of a new contract with the competent Ministries and the EYDAP Fixed Assets are already in progress. The existing contract was initially extended for 6 months, ie until April 25, 2020 and then extended until December 31, 2020.

In 2019, the Board of Directors of EYDAP SA approved the tender procedures for the selection of contractors for the preparation of three studies, through which in combination with a study prepared by EYDAP, the implementation of four important critical projects will be achieved in External Water Supply System (EPS). These studies are expected to be contracted in the first months of 2020 and concern:

- Reconstruction works of Mornos Marathon 1800mm Joint Aqueduct, section Kleidi – Daphnoula
- 2. Provision of raw water transport infrastructure from the Kitheron Canal to the wider Kokkinio area
- 3. Completion of interventions in the Thebes Canal of the Mornos Aqueduct
- 4. Construction of a supplementary 2000mm duct, to the Mornos Aqueduct downstream of Kitheron.

The completion of these projects will permit the support and safeguarding of the existing critical infrastructures of the External Water Supply System and consequently their complete operation. In addition it will offer an alter native water supply route for Athens from Lake Yliki, as an alternative source of supply.

#### EYDAP has undertaken

- the obligation to prepare on an annual basis the Management Plan of the available raw water supply systems,
- the maintenance and continuous information of the State, on the data of raw water supplies to the outflows from the sources and to the inputs to the WTP's.



GRI 103-2

#### How do we manage it?

#### WATER SUPPLY SOURCES

EYDAP obtains raw water, mainly from surface water resources the reservoirs of Marathon, Yliki, Mornos, Evenos, which are classified in category A2, according to the European Directive 75/440 / EEC on the quality required for surface water intended for the production of drinking water.

Of the reservoirs, only that of Yliki is natural (lake), while the rest have been created by the construction of dams at suitable points in the riverbed of Charadros (Marathon dam), Evenos and Mornos.

The water sources used by EYDAP also include groundwater resources, which can be exploited with the operation of about 100 boreholes with a total annual pumping capacity of approximately 70-125 million cubic meters of water per year, depending on the availability of groundwater resources and their usage policy.

Based on the current operating conditions, the water sources of EYDAP can be divided as:

- Main water source: Mornos, Evinos.
- Auxiliary water source: Marathon (for the supply of Galatsi WTP) and Yliki (in cases of emergency).
- Backup water source: underground water resources boreholes.

The transfer of water from the water sources to the water treatment plants is done through the following aqueducts, with a total length of 495km:

- Mornos Aqueduct, Main Aqueduct
- Yliki Aqueduct, Main Aqueduct
- Mornos Yliki,
   Connecting Aqueduct

- Marathon Galatsi,
   Connecting Aqueduct
- Distomo, Connecting Aqueduct
- Evinos-Mornos Tunnel,
   Connecting Aqueduct

Despite the great distance of the main water suppliers (Mornos, Evinos) from Attica, most of the water is transported through the aqueducts by the force of gravity, without the economic and environmental burden of energy-intensive pumps, which are activated only in cases of emergency, thus actively reducing our environmental footprint.

EYDAP ensures the **protection of reservoirs** by complying with strict legislation (Sanitary Order A5 / 2280/1983 for the protection of water used for the water supply of the capital area from pollution and contamination), by controlling the works and activities in the protection zones of the reservoirs and by taking samples to measure reservoir water quality.



#### WATER SUPPLY SYSTEM MANAGEMENT

The ways and methodologies of water supply system management are prioritized

- the operation of the existing water supply system,
- in the regulation of the flow downstream of the reservoirs,
- in the division of water abstraction by main, secondary or backup source
- in the transport of water through the network of external aqueducts
- and in additional projects for the reinforcement and safety of the water supply system, if required.

The object of the Management Plan is the study of rational, efficient and sustainable ways and methodologies of management of the External Water Supply System (EYS), with the aim of quantitatively reliable, qualitatively and environmentally safe and economically adequate coverage of water demand in the region, through the proper utilization of the water resources available to meet this demand.

The management of the water resources system aims at the determination of the quantities to be taken by the reservoirs and the aquifers as well as at the way of their channeling (distribution) in the network of external aqueducts, in order to ensure the long-term adequacy of water resources in EYDAP's competence at the lowest possible cost. It also plans additional projects to strengthen the water supply system, if required. External aqueduct network means the total of pipelines and other projects (such as pumping stations, etc.) from the outlet of reservoirs to the Water Treatment Plants.



The external water supply system is shown in the map above.

The **Decision Support System**, which is used operationally on a day to day basis by EYDAP for the supervision and management of the water supply system, includes the following components (subsystems):

- a) Geographic information system for the display and supervision of the water supply system,
- b) Measuring system of Athens water resources,
- c) System for assessment and forecasting of Athens water resources,
- d) Support system for the management of Athens water resources.

The coverage with drinking water is ensured by the installations of the water supply network.

1,050,310 m<sup>3</sup> average daily consumption 2019



851,636 m<sup>3</sup>
minimum daily consumption
December 2019



1,255,556 m<sup>3</sup>
maximum daily consumption
July 2019



All the following facilities ensure the uninterrupted continuous supply of drinking water and the ability to meet the daily needs of consumers in the current seasonal demand conditions.



14,000 km Supply network\*



2,160,000 Connections



1,000 drinking water quality control points \*\*



1,050,310 m<sup>3</sup>
Daily average
distribution
of drinking water



100 remote monitoring points SCADA



660 pressure reducing valves Diameter from 80mm up to 600mm



77 pumping stations of total installed capacity 33.200 HP



**57 tanks** with a total capacity of 885,000 m<sup>3</sup>



1,246 points of recording and telecommunication\*\*\* data (SMS) and (GPRS)

\* The main water supply network (primary network) has a length of about 1,300 km and consists of pipes with a diameter greater than 300mm up to 2000mm. The distribution network has a length of about 12,700 km and consists of the secondary and tertiary network, which have a total length respectively of about 9,000 kilometers the secondary and about 3,700 kilometers the tertiary. The distribution network consists of pipes with a diameter of less than 300mm, which carry drinking water to consumers.

\*\* 700 for chlorine measurements and 300 combined for chlorine measurements and other parameters depending on the requirements of the legislation.

In 2019, about 150 new drinking water quality control points were added to the water supply network, in order to update and enrich the sampling points, and also to cover in terms of quality control the new networks that EYDAP incorporated after it received them from the local authorities. (Salamis, Magoula, Aghios Demetrios in Penteli).

\*\*\* In **2019**, telemetric data recording and telemetry instruments were added to 463 locations of the water supply network (GPRS).

Further technical, quantitative and qualitative data can be obtained from our website in the WATER SUPPLY section.

GRI 103-3, GRI 303-1 (2018), GRI 303-3 (2018), GRI 303-5 (2018)

#### How do we evaluate our approach?

The applied methods of water resources management are characterized by:

- Scientifically based rationality
- Efficiency: as they utilize water resources to the maximum extent possible
- Sustainability: as they do not deplete future water resources by meeting the needs of today

**Demand is met with increased reliability**, reducing the likelihood that the levels of water in the system will be too low.

The concept of reliability primarily refers to the reduction of uncertainty caused by the variability of the natural supply of water resources (droughts), but also includes other sources of uncertainty, such as adverse events (damage) during works in the water system, which EYDAP takes care of ensuring the proper operation of the system. Also, the demand is met with water of safe quality, made available for irrigation, without creating problems in the environment (ecosystems) due to excessive water deprivation. Finally, the demand is always met in the most economical way.

EYDAP manages water demand, developing leak reduction programs (pressure management - water supply zoning, immediate repair of breakdowns - breakage of water supply pipes, repairs and replacement of water supply networks) aiming not only at servicing customers, but also at preventing the waste of the natural resource.

Today EYDAP provides **drinking water of excellent quality, in the necessary quantity and pressure**, to areas where the water supply system is managed directly by the Company but also to those areas where the local network is managed by the local authorities

For those few areas that are not supplied with water by EYDAP but from boreholes, mainly in West Attica, EYDAP has launched a series of interventions and actions, in collaboration with the local authorities, so as to include them shortly in the areas that will be receiving water from EYDAP.

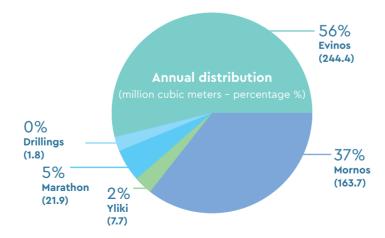
In this direction, the tender procedure is underway for the construction of a new 500mm steel feed pipeline, approximately 15km long and of a water tank, through which the area of Kinetta will be supplied with water. Until today Kinetta is not supplied with EYDAP water. The contractor was appointed in 2019 and the signing of the relevant contract is expected in March 2020.

In progress is the **elaboration of a study by the Municipality of Megara** in collaboration with EYDAP, for the supply of **Alepochori** and other nearby areas of the wider area of the **Municipality of Megara**.

At the same time, the **construction of the undersea supply pipeline** has started, which will connect Salamis with Aegina, **under the responsibility and the competence of the Region of Attica**, through which EYDAP will supply with water **the island of Aegina**.

THE DISTRIBUTION OF RECEPTIONS FROM WATER RESOURCES FOR THE COVERAGE OF WATER SUPPLY NEEDS (EYDAP, MUNICIPALITIES, ORGANIZATIONS) IS BEING ANALYZED ACCORDING TO THE YEAR 2019 AS FOLLOWS:





The above distribution refers to **the optimal management of water resources for the specific year**. Extractions are measured at water sources with flowmeters and time series and recorded in a relational database.



# 3.2 Reliable Water Supply Network & Water Efficiency

GRI 103-1







#### Why is it essential?

For EYDAP, ensuring throughout the water supply system a sufficient amount of high quality drinking water under conditions of acceptable pressure, while protecting the natural resource, is a top priority.

The design, construction, operation, maintenance and continuous development of the water supply network is a complex multifactorial process, which requires high know-how.

The water supply system of an area, through which its supply with drinking water is ensured, includes a system of tanks, supply (main) pipes, distribution pipes and water supplies.

By "water supply network" we mean all the pipes that carry treated water, from the local Water Treatment Plants to the water meters of the consumers. This is the main part of all the facilities of a water company which for the most part is underground. The water supply network provides pressurized water suitable for drinking, according to the current standards in Greece to all consumers.

The spatial extent of the water supply area, the morphology of the ground, the density of the population and the estimated change as well as its geographical distribution, the height of the buildings, the expected consumption by calculating the daily average – low and high – are some of the factors which determine the amount of drinking water supplied, the supply pressure and consequently the rational design of the network.

The wider area of the Capital was defined as the area of competence of EYDAP, as it is defined in its founding law 1068/1980. Law 2744/1999 gave EYDAP the opportunity to expand its activities, under conditions inside and outside the Attica Basin. More detailed information can be found in the corresponding section, which describes the area of EYDAP's competence, with the administrative boundaries of the Municipalities and Communities, which are supplied either directly by EYDAP's network management, or with special connections (network support), where the network is managed by the local municipalities.

# The object of EYDAP

is the proper operation, maintenance and improvement of the drinking water distribution network (main supply pipes, distribution pipes, supplies, tanks, pumping stations and their equipment) throughout its geographically extended area of responsibility.

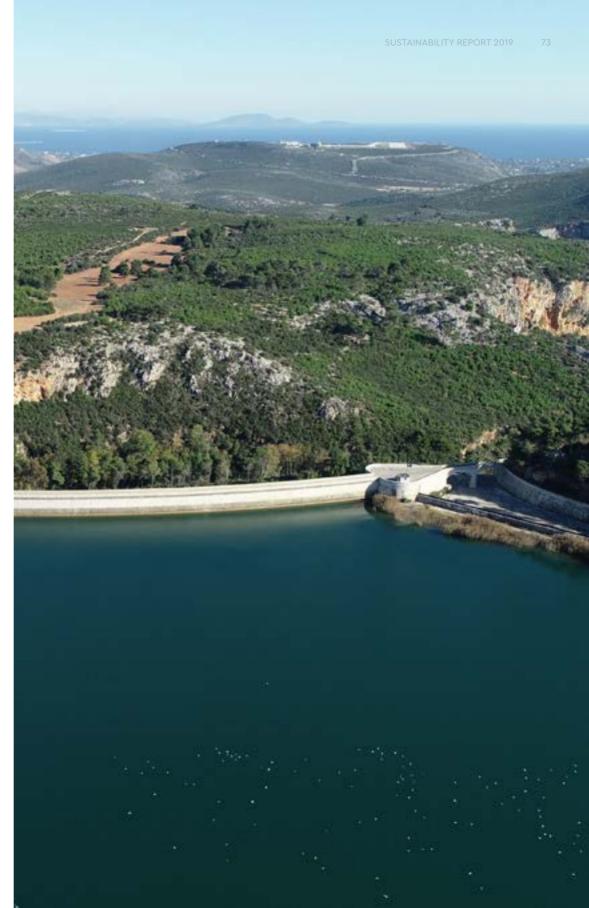
## The ultimate goal

is the most rational management and optimization of the quality of drinking water provided.

## Strategic target

of EYDAP is the gradual incorporation of the water supply networks of all the Municipalities of Attica.

Responsible management of the water supply network and ensuring water efficiency contributes to meeting the needs and expectations of our stakeholders and increasing their trust in the Company. In this way EYDAP contributes positively to Sustainable Development and specifically to the achievement of Sustainable Development Goals 6 "CLEAN WATER AND SANITATION", 11 "SUSTAINABLE CITIES & COMMUNITIES" and 12 "RESPONSIBLE CONSUMPTION AND PRODUCTION" as defined by the United Nations, which contribute to the gradual improvement of global resource efficiency in both consumption and production and in the effort to separate economic growth from environmental degradation.



GRI 103-2, GRI 103-3, GRI 303-1 (2018), EYDAP INDEX

# How do we manage it and how do we evaluate our approach?

The implementation of this object requires the execution of the following main categories of activities:

Monitoring and improving the operation of the water supply network

(demand monitoring, pressure monitoring, pressure zone modifications etc.)

Attica is characterized by a difficult topography. EYDAP provides water in areas with ground altitudes from 0 to 600 meters above sea level. In order to better control the pressure of the pipes, **pressure zones were created**, is ground areas every 30 to 40 meters of altitude difference, which have a specific pressure. The pressure range within the hydraulic zones ranges from 2 to 12 atm with the vast majority ranging from 4–6 atm. The water supply network is monitored on a 24-hour basis by a remote control system (SCADA).

In 2019, in order to better manage the network, EYDAP installed 10 new flow meters in supply ducts of the network and 463 telemetry stations in addition to the existing ones, raising the total number of telemetry stations to 1246, SCADA stations to 100 and the number of flowmeters at about 110.

# Network maintenance - preventive and emergency

(maintenance of pumping stations valves – fire hydrants, cleaning of tanks, repairs of leaks of

The statistical analysis of the faults determines the preventive maintenance of the pipes. Similar actions are initiated by EYDAP for the maintenance of the supply pipes of the water supply network through specific modern intervention methods, as well as for all the other supporting infrastructures of the Water Supply Network (pumping stations, tanks, ducts for special connections and large valves, fire hydrants).

The daily **failures** of the water supply network caused by leaks or breaks in the network (faults – complaints) are collected in EYDAP's call center (1022) and on our website and are routed for repair to the competent technicians of the Water Supply Sectors. The **repairs** are implemented **immediately**, in order to minimize the inconvenience caused to consumers and to restore the smooth water supply of the areas where the network is damaged.

**In 2019, the total leaks** - breaks of both pipelines and valves in all the networks operated by EYDAP amounted to approximately 6,900. These leaks were repaired in their entirety immediately.

Smart Meters Replacement of network The existing network of EYDAP consists of pipes of different cross sections and different materials, which have been installed over the years to serve the increased water needs of the residents of Attica.

Many of these pipelines have been in operation for a number of years. Due to their initial installation and due to the development of the city and the successive configurations of roads and other public areas, in combination with other wear factors (vehicle traffic, other external factors), they have suffered significant stresses that lead to frequent breakage. Similarly, the buildings' water connections, supplied by these pipes, are as old and suffer similar stresses. The operating conditions of these pipelines are evaluated by EYDAP. Replacement programs are implemented with the use of new pipelines and water connections for the buildings, made out of the most modern materials.



New type water meter shaft



Certified water meter workshop



New type water meter shaft system

# In 2019, EYDAP replaced: a total of 62,000 km of pipelines of 110mm, 160mm, 200mm, 250mm etc 1,200

old water meters for special connections
of 2 to 6 inches with corresponding smart meters
and an equal number of dataloggers.

In 2017 and 2018, 200,000 old water meters were replaced
with new ones, of which 80,000 are smart meters.



In 2019, 80% of the program was completed. The project as a whole will be completed in May 2020. EYDAP will be able to collect detailed data on the status of each special connection with a tele-programmed rate of data collection and transmission to central infrastructure. It will also provide consumption information in detail and diagrammatically to customers online.

EYDAP has included in its **investment program** the installation of **300,000 new** water meters (smart meters) to replace existing of older technology in various areas, in order to move to the smart water network and to modern technologies, which will enable the optimal management of water supply zones. For this reason, it is in **consultation with domestic telecommunications companies**, in order to formulate the appropriate synergies regarding the modern networks for data transmission.

**EYDAP continues to place new common water connections and Special Connections in buildings**, other facilities and institutions, satisfying the requests submitted by the interested parties (consumers, municipalities, industries, etc.). The requests of the consumers who ask for new water connections are examined by EYDAP and as long as they are approved, in accordance with the provisions of the Regulation of Operation of Water Supply Networks, the water meters are installed.

The water meters that are connected to the water supply network, are divided into: Water supply, fire brigades, common real estate areas, irrigation of public or municipal spaces, temporary for construction sites or other use.

In **2019**, EYDAP installed approximately 4,050 household, special and firefighting water connections.

Incorporation of new networks

Regulation of Operation of the Water Supply Network

Charter of
Obligations towards
Consumers

EYDAP incorporates into its area of competency the Water Supply Networks, which are managed by local municipalities. The incorporation of these Networks, which currently focus mainly on Eastern and Western Attica, is a strategic goal of EYDAP, as it is related to the expansion of its activities, in combination with the provision of water of excellent quality to all residents of the Basin of Athens, while also offering better services to the citizens of these areas.

The incorporation of the Municipal Water Supply Networks to EYDAP network does not take place unilaterally. A basic precondition for this is the positive decision of the City Council of the Municipality.

In 2019, EYDAP set the procedures for the smooth integration into its network of the municipal water supply networks of Salamis, Magoula of the Municipality of Elephsis and the community of Aghios Dimitrios of the Municipality of Penteli, which were incorporated in 2018.

At the same time, the consultations with the Municipality of Megara for the incorporation of the water supply networks of all areas of the Municipality (Megara, the rest of the prefecture of Peramos, Kinetta, etc.) are in the final stage.

Under certain conditions, EYDAP may undertake the supply and management of networks in areas outside its competence.

In 2009, the new Regulation of Operation of the Water Supply Network was approved, which details the most important issues in the operation of the Company. The consumer accepts automatically this regulation through the water supply contract with EYDAP.

In 2007, by Decision of the Board of Directors of EYDAP and in application of the obligation provided in article 7 par. 3 of law 3429/2005 for all Public Enterprises and Organizations, the **Charter of Obligations to the Consumers of the Company was approved (XYK)**. This includes the basic obligations of the Company to the Consumers, the times of their satisfaction, as well as the way of claiming these rights by the Consumers. The text of the EYDAP XYK is short, comprehensive and comprehensible and is available on the EYDAP website in the corresponding section: https://www.eydap.gr/CustomerSupport/CustomerLiability/



The rapid international developments in the field of business, the responsibility of water supply of more than 40% of the population of Greece, the residential expansion and of course the obligation to the Company's customers, make necessary the upward course of EYDAP, in order to implement crucial projects and increased yields.

The successful course of the Company, includes the concentration of effort on customer satisfaction, the rational management and protection of water resources and the maintenance of a two-way and constructive relationship Company – Customer, in order to improve the provision of services of the Company.

For this purpose, the Company has included in its **strategic actions** for the optimal management of its network, the following:

The application of advanced pressure management, which results in the avoidance of unnecessary stress on the network pipes from excessive pressures and consequently the avoidance of network failures, thus achieving an increase in life time of a large part of the network with significant financial benefit

The identification of the frequency of occurrences of faults, the speed and quality of repairs, the determination of their geographical dispersion, the cause of their occurrence, etc. in order to compile a comprehensive and systematic maintenance program of the water supply network.

The reliable and organized collection of data from faults, operation, etc. so that through structured and cooperative applications the further processing and statistical utilization of the collected data is achieved.

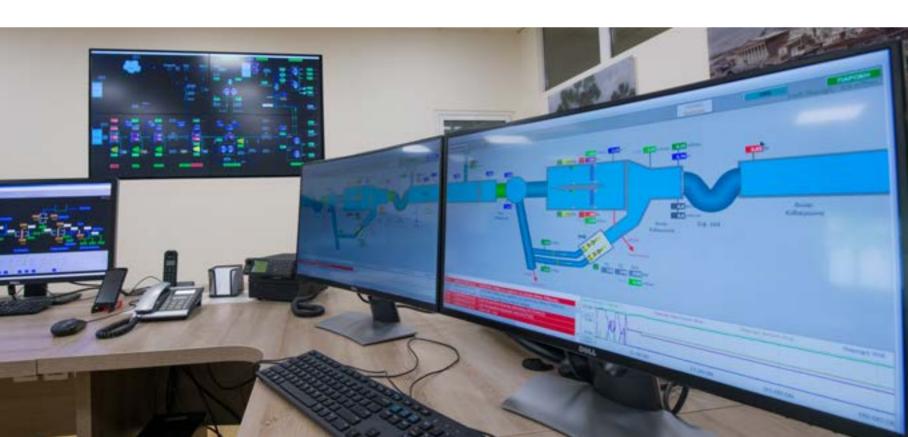


The inclusion, in the five-year investment program of the Company, of a targeted, with documented priority program of replacement of water supply network, which includes the replacement of approximately 150 km of pipes (primary-secondary and tertiary network), which corresponds to approximately 1.5% of total length of the network per year, following and adhering to global best practices.

The actions that have already been launched (mass replacements of water meters, interventions in supply ducts, maintenance and renovation of existing infrastructure such as pumping stations, water supply wells and valves, routing of operational interventions in the network through modern software) aim at the most efficient operation of the water supply network, the consistent reliable and uninterrupted supply of water, the improvement of the level of service to consumers but also the upgrading of the overall corporate image.

# EYDAP's goal in the Water Supply Sector is the stable and targeted transition to new technologies by monitoring and utilizing all the modern trends of the technologically advanced international water market.

In this regard, a number of EYDAP executives monitor the activities of international water organizations, and international conferences related to water, visit large factories producing materials and instruments and are in constant consultation with other advanced water companies and international practices, which have incorporated or have begun to integrate new technologies in order to switch to the smart water network.



# 3.3 Consumers' Health & Safety: Water Supply Quality

GRI 103-1







# Why is it material?

Water is a fundamental good, essential for the preservation of life and well-being of the society. Access to safe and clean drinking water has been identified by the international community as a fundamental human right and has been characterized as one of the Developmental Goals of the Millennium. EYDAP identifies clean drinking water as an indisputable factor of well-being and sustainability, according to Goals 3 "GOOD HEALTH AND WELL-BEING" and 6 "CLEAN WATER AND SANITATION", as defined by the United Nations.

EYDAP, being the largest water services provider, and being aware of its responsibility towards millions of consumers, cares for the excellent quality of drinking water. Through constant investments in infrastructure projects, in technology and training of its human capital, EYDAP ensures the quality of drinking water, which is one of the highest in Europe, always in harmony with the current legislation.

# 10 (excellent) for the quality of drinking water for the city of Athens

**Urban Water Atlas for Europe 2017,** published by the EU and presents the best practices in European cities (Urban Water Atlas for Europe 2017, European Commission, Publications Office of the European Union, Luxembourg, p.54–55).

# 99,822% water quality of EYDAP

European Benchmarking Co-operation 2019 (annual international evaluation of water supply companies)

A value higher than the average score achieved by the respective participating companies.

# The excellent quality already begins from the main supply reservoirs Evinos and Mornos.

The danger for the gradual degradation of the quality of supply water due to pressuring of human activities is limited because of their location - are situated at high altitude, in rugged, underpopulated areas with very limited activities. Additionally, EYDAP ensures the protection of its reservoirs by complying with strict legislation as it arises from the Sanitary Provision A5/2280/1983 «For the protection of water used for the water supply of the region of the capital from pollution and infections and of the PD51/2007 concerning the establishment of measures and procedures for integrated water protection and management in compliance with the provisions of Directive 2000/60/EC.

water quality that is provided to the consumers can however occur either

from a natural disaster, or an involuntary inflow of unsuitable substances in the water supply network, or a malicious or terrorist act, or inexpediency in the function of the facilities.

The precautionary treatment of such risks, in addition to enhancing the good reputation of the Company, quarantees the safety of consumers and the resource. In addition, it prevents the imposition of fines for non-compliance with current legislation.

For all the above reasons, and in order to continuously ensure the quality of water supply for consumers, EYDAP has conducted an analysis and assessment of the risks it may face in this area. For none of them, the probability of occur-The risk of a sudden deterioration in rence is not high. For each case of risk. a relevant precautionary plan has been prepared and implemented.

EYDAP ensures that all hazards that could potentially disrupt the quality of both the water entering its facilities, but especially the water that reaches the consumer's tap, are adequately i dentified and controlled through:

- Surveillance of the activities in the **Water Basins**
- Maintenance, supervision and operation of dams / reservoirs / aqueducts. through which water is collected and Attika is supplied with water
- Maintenance and operation of the drinking water distribution network
- Continuous quality controls of raw and drinking water available to the public



GRI 103-2

# How do we manage it?

EYDAP ensures the implementation of appropriate water quality control procedures, so that:

- The requirements of the Legislation and its Stakeholders are met.
- Good laboratory practices and appropriate methods to ensure the reliability of the measurements are applied.
- Adequate and sufficient resources (human resources, equipment, information) for the implementation of quality operations
  are provided and used in such a way as to ensure the reliability and overall effectiveness of all measures designed and
  implemented.
- The quality, impartiality and integrity of the measurements made during the quality controls are not affected by any commercial, economic or other pressures.
- All staff involved to be trained and evaluated, in order to know and faithfully implement the task assigned to them.

#### **CONTROL FRAMEWORK**

EYDAP has established the appropriate control framework to ensure that the water available to consumers is safe.

#### The quality controls concern:

- The raw materials used for water treatment
- The construction materials of the drinking water distribution network

The chemicals intended for the treatment of water for human consumption and the materials used in the drinking water distribution networks supplied by EYDAP are specified, in order to be in accordance with the internationally formed standards, such as e.g. ELOT En 878, ELOT En 937, ELOT En 12201 etc. For each substance and for each material there is a quality plan based on which the suitability for its intended use is ensured.

- Raw feed water, in reservoirs and at the entrance of Water Treatment Plants
- The drinking water available to the public

The daily quality controls of raw and drinking water, which are carried out

7 days a week in the chemical and microbiological laboratories of EYDAP, aim to ensure and certify the excellent quality of water that the Company offers to the residents of Athens. For this reason, the water quality of the four reservoirs, Marathon, Ylikis, Mornos and Evinos, is closely monitored, with on-site visits, sampling and analysis at least eight (8) times per year, as well as the quality of drinking water in the water supply network, with daily sampling and analysis, so that any problem that may arise is immediately perceived and addressed in a timely manner.

With the aim of always ensuring quality, the checks carried out, especially in drinking water, exceed the frequency mandated by law. Indicatively, it is stated that the number of drinking water samples tested for microbiological parameters exceeds 9,000 per year compared to the 3,300 required by law.

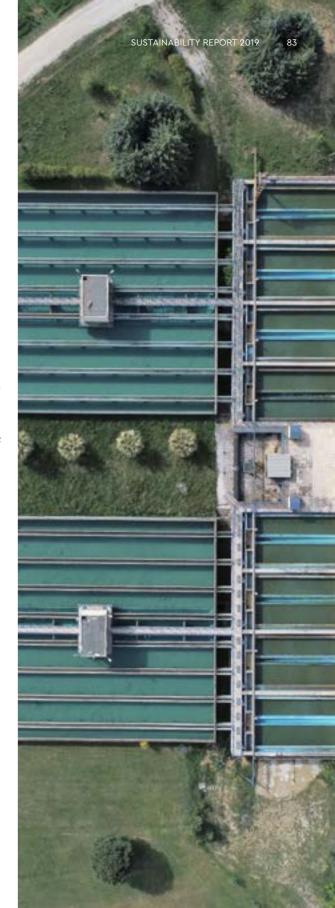
EYDAP uses accredited laboratories in Galatsi and Acharnes, for water quality control.

In these laboratories, samples of raw water from the reservoirs, the wells of EYDAP and samples of drinking water from the Water Treatment Plants and from the water supply network of the Company are analyzed. In addition, EYDAP uses laboratories for the control of the intermediate stages of water treatment, installed in each of the four Water Treatment Plants.

**Water Treatment Plants** are absolutely crucial for the water we drink, they make it drinkable and of excellent quality.



4 Water Treatment Plants
Galatsi, Acharnai (Menidi), Polydendri (Kiourka),
Mandra Aspropyrgou
with a cumulative maximum refining capacity
of 1,900,000 m³ of water per day



# WATER ARRIVES RAW IN WTPS AND PASSES THROUGH 5 STEPS OF TREATMENT, WHICH MAKE IT DRINKABLE.

# 1st stage: addition of chlorine (disinfection)

Prechlorination eliminates a significant number of microbes present in the water and facilitates its processing.

# 2nd stage: addition of a luminum sulfate (flocculation)

The addition of aluminum sulfate helps the solid particles in the water to come together and settle.

The whole process is known as flocculation.

# 3rd stage: subsidence

After flocculation, the agglomerated solids settle to the bottom of the settling tank. In this way the water is purified up to 80%.

# 4th stage: filtration

The very light particles that do not settle (20%), are retained in special sand filters, from which the water is extracted clear and clean, to be given for consumption.

# 5th stage: postchlorination

If prechlorination is deemed unsatisfactory according to the Sanitary Regulations, additional chlorine is added when the water enters the closed storage tanks of the WTPs before its distribution in the city network.

The most modern analytical methods are applied in the laboratories of EYDAP for the determination of the data required in water samples in order to achieve high sensitivity, accuracy and repeatability of measurement. Analytical techniques used include automatic photometric analysis, ion chromatography, gas chromatography with MS / MS "triple quadrupole" detectors, ECD, FID and olfactometry, HPLC liquid chromatography with fluorescent detectors and UV detection, transmission, online Daphnia toxicity testing, and the ELISA method.

Critical quality parameters, such as residual chlorine, are monitored online, in selected tanks of the drinking water distribution network. Sophisticated systems for the on-line monitoring of critical quality parameters are also installed in key locations and in external aqueducts, which send real-time results with telemetry and timely alerts in cases of extreme prices.

In 2019, in the context of constant modernization of the technologies followed for water quality control, the two pilot "smart systems" for monitoring quality parameters that were already installed in 2018 in the drinking water network, were upgraded with additional sensors and capabilities, according to EYDAP requirements, in order to warn early and prevent possible problems.



#### **PROJECTS AND INITIATIVES**

- In 2019, in the context of continuous improvement of quality control mechanisms, EYDAP proceeded to the update and enrichment of sampling points within its area of competence, increasing their number by 10%. The new points are located in all areas of Attica (Aspropyrgos, Varri, Voula, Saronis, Lavreotiki, Anthousa, Acharnai, Glyka Nera, Kifissia, etc.) including areas where municipal networks have recently joined the network of EYDAP (Salamina, Magoula, Aghios Dimitrios in Penteli). In this way we achieve representative monitoring of water quality throughout the network.
- In 2019, the information program continued with letters to consumers / property owners, regarding the water quality control that is carried out based on a program in their properties, in the context of the legal requirement for water checks in consumer taps.
- Executives of EYDAP due to their specialization and experience participate institutionally in the consultation that started in February 2018 and is expected to be completed within 2020 for the recast of Directive 98/83 / EU on the Quality of Water for Human Consumption.
- EYDAP systematically monitors and records, in a file kept in the Water Quality Control Service and in accordance with the provisions of the Quality As-

surance System, not only the current legislation but also the **international trends in regulatory issues**, which may become future legislative or stakeholder requirements. As a result of this action, the **list of monitored substances** is constantly being enriched.

In this context, **contracts** were signed in 2017 and are in progress with **Greek Educational and Research Institutions** (EKPA, NCSR Demokritos), which are among the pioneers in their field in Europe, in order to cooperate in the investigation of specialized water quality issues.

The cooperation with EKPA aims to apply a combination of advanced techniques of «targeted» and «nontargeted» analysis, which scan the sample to detect and identify a wide range of unknown substances (investigate the detection of more than 10,000 compounds, which so far do not exist in watch lists and the detection of cases of discharge of pollutants into the environment that until now were impossible to detect). Through this cooperation, samples from the reservoirs of EYDAP (Mornos, Evenos, Marathon, Yliki) are examined.

This collaboration also aims at helping EYDAP executives gain experience in the most modern techniques in chemical analysis.

The collaboration between EYDAP and NCSR DIMOKRITOS started in 2017 with the granting of an industrial scholarship to a postdoctoral researcher, with the aim of developing new methods and techniques that will contribute to the risk assessment of organic pollutants throughout the drinking water cycle of EYDAP, from the reservoirs to the consumer tap.

• The procedures for the supply of state-of-the-art **analytical equipment** have already been launched and are in progress. Part of this equipment, which includes UHPLC-HRMS of q-TOF technology, automatic pre-treatment of samples with SPE, ICP-MS, is expected to be installed in laboratories by the end of 2020 while new related supplies are scheduled for 2021.

At the same time, procedures are underway to increase the number of instruments for continuous monitoring of drinking water quality, through the supply and installation of 29 new online instruments (in addition to the existing ones).

# How do we evaluate our approach?

#### **CERTIFICATIONS**

The Chemical Laboratories of Galatsi and Acharnai, as well as the Microbiological Laboratory are accredited according to ELOT EN ISO 17025 since 2005, by the National Accreditation System (ESYD), for conducting tests for the determination of chemical and microbiological parameters in raw and in drinking water (Certificate No. 192).

In 2019, during the annual evaluation, the ESYD approved the maintenance of the accreditation of the laboratories and granted the extension of the Official Scope of Accreditation (EPED) to a significant number of new methods and parameters as well as to the conduct of sampling.

EYDAP water laboratories are now accredited for a total of 72 types of tests / parameters for drinking and surface water, as well as for sampling. EYDAP water laboratories systematically monitor international developments and trends in the field of water analysis. The continuous evolution and improvement of their operation is reflected in the continuous expansion of the scope of accreditation of laboratories, i.e. in the continuous increase of the number of substances determined using accredited methods.





#### **COMPLAINT MANAGEMENT - CONSUMER INFORMATION**

# EYDAP gives absolute priority to ensuring a high level of satisfaction all of the consumers.

It has set up a **hotline (1022)** to record and quickly address any quality issues that may be reported by the consumer public.

All quality issues that are raised, are forwarded directly through appropriate software to the Water Quality Control Service, which undertakes the investigation of each issue. In 100% of cases, the response of EYDAP is immediate and within 24 hours, the consumer is contacted by telephone. If a relative necessity arises and the consumer wishes, sampling is carried out from the property where the complaint is declared and analyses of the respective samples.

In 2019, 45.9% of the complaints that were expressed were resolved through telephone communication, while the remaining 54.1% were investigated through sampling and laboratory analyses. If the investigation of the complaints raises the need to implement technical actions, the competent Technical Service is activated and relevant re-inspections are carried out until it is ensured, through communications with consumers and through the required checks, that the issue has been remedied.

In 2019, technical actions were required in 3.4% of the quality complaints to 1022 and 100% of the complaints for which there was a need for intervention by EYDAP were resolved.

There was no incident of dissatisfaction with a consumer request or an incident of a fine or compensation for water quality issues.

# EYDAP systematically takes care of informing consumers regarding water quality in the following ways:

- The average values of all the parameters specified are exported on an annual basis. These prices are posted on the Company's website, so that anyone interested can access them.
- Responds in writing by providing upto-date information on water quality, to any consumer request expressed through the customer service line 1022, through an application at a regional branch of the company or by conventional or electronic mail. In most of these cases the answers include reports of results of samples taken from taps inside the properties of the interested parties.
- The water quality data of the EYDAP water supply network are systematically sent to the Ministry of Health. The data for the three years 2017 2019 were sent to the Ministry of Health in early 2020.

#### **PERFORMANCE**

As evidenced by the results of approximately 185,000 assays in approximately 10,000 samples of drinking and 2,000 samples of untreated water per year, EYDAP constantly certifies that the water of Athens is of excellent quality and one of the best in Europe.

The results of the analyzes certify that the quality of drinking water of EYDAP **meets the legal requirements** of JMD C1 (d) / GP oik.67322 / 2017 "Quality of water for human consumption" in compliance with Directive 98/83 / EC of the Council of European Union (as amended and in force).

On an annual basis, **internal self-evaluation inspections** of the individual processes of the Water Quality Control Service are carried out and all the functions related to the Quality Control are reviewed. In this way, any deviations from the established procedures are identified and opportunities for improvement are recorded, which are then planned and implemented.

During the reporting period, no incidents of non-compliance with regulations and voluntary rules related to the quality of drinking water were identified with negative effects on HEALTH and CONSUMER SAFETY



# Drinking water quality control data from EYDAP's water supply network for 2019

Parameter			Parametric Value (Based on current national legislation JMD C1(d)CP oik. 67322/2017)
Conductivity. 25°C	μS/cm	303	2764, 25°C. (2500, 20°C)
Hydrogen Ion Concentration	рН	7.7	6.5-9.5
Opacity	NTU	0.31	Acceptable to consumers and no abnormal change
Residual Chlorine	mg Cl2/l	0.36	Acceptable to consumer and no abnormal onlings
Aluminum	μg Al/l	95	200
Taste *	F3	1 (acceptable)	Acceptable to consumers and no abnormal change
Odour *		2 (acceptable)	Acceptable to consumers and no abnormal change
Colour	mg Pt/l	0.53	Acceptable to consumers and no abnormal change
Calcium	mg Ca/l	47	Acceptable to concented and the abnormal change
Magnesium	mg Mg/l	6	
Hardness	mg CaCO3/I	141	
Alkalinity (Total)	mg CaCO3/I	117	
Ammonium	mg NH4+/I	0.01	0.50
Sulphate	mg SO, <sup>2-</sup> /I	24	250
Chlorides	mg Cl-/l	9.2	250
Nitrate	mg NO <sub>x</sub> /I	0.9	50
Nitrite	mg NO <sub>2</sub> /I	N.D.	0.1
NITRITE/3 + NITRATE /50	mg/l	0.02	1
Fluoride	mg F <sup>-</sup> /I	0.1	1.5
Phosphate	mg PO, 3·/I	0.012	5 mg/l P <sub>2</sub> O <sub>5</sub>
Cyanide	µg CN-/I	N.D.	50
Bromine	μg BrO、/I	N.D.	10
Sodium	mg Na/l	6.5	200
Potassium	mg K/l	0.94	200
Silver	μg Ag/l	1.02	
Arsenic	μg As/l	N.D.	10
Barium	μg Ba/l	31	10
Boron	µg В/I	9	1000
Cadmium	μg Cd/l	N.D.	5
Total Chromium	μg Cr/l	N.D.	50
Copper	μg Cu/l	6.4	2000
Iron	μg Fe/I	13.4	200
Mercury	μg Hg/l	0.061	1
Manganese	μg Mn/l	1.4	50
Nickel	μg Ni/l	2.1	20
Lead	μg Pb/I	1.4	10
Antimony	μg Sb/I	N.D.	5
Selenium	μg Se/l	N.D.	10
Tin	μg Sn/l	0.65	10
Zinc	μg Zn/l	42	
Dissolved Organic Carbon (DOC)	mg/l	1.3	No abnormal change
Chloroform (CHCl3)	μg/l	14.8	The ability of an area of the ability of the abilit
Dichlorobromomethane (CHBrCl2)	μg/I	5.2	
Dibromochloromethane (CHBr2Cl)	μg/I	1.6	
Bromoform (CHBr3)	μg/l	0.1	
Total Trihalomethanes	μg/l	21.7	100
Trichloroethylene	μg/l	N.D.	
Tetrachloroethylene	μg/I	N.D.	(Sum of two substances) 10
Benzene	μg/l	N.D.	1
Bromobenzene	μg/l	N.D.	,
Chlorobenzene	μg/I	N.D.	
Ethylbenzene	μg/I	N.D.	
n-butylbenzene		N.D.	
1.2-dichloroethane	μg/l	N.D.	3
Naphthalene	μg/l	N.D.	
	μg/l		
Toluene Hexachlorobutadiene	μg/l	N.D.	0.07
пехаспіогоритаціепе	μg/l	N.D.	0.03

Parameter	Unit	Average	Parametric Value (Based on current national legislation JMD C1(d)CP oik. 67322/2017)
1.2.4-trichlorobenzene	μg/l	N.D.	
Dichlobenil	μg/l	N.D.	0.1
Desethyl-terbuthylazine	μg/l	N.D.	0.1
Terbuthylazine	μg/l	N.D.	0.1
Propyzamide	μg/l	N.D.	0.1
Methyl Parathion	μg/l	N.D.	0.1
Terbutryn	μg/l	N.D.	0.1
Metolachlor	μg/l	N.D.	0.1
Aldrin	μg/l	N.D.	0.03
Parathion	μg/l	N.D.	0.1
Isodrin	μg/l	N.D.	0.1
Triclosan	μg/l	N.D.	0.1
Carfentrazone ethyl	μg/l	N.D.	0.1
Diflufenican	μg/l	N.D.	0.1
Mefenpyr diethyl	μg/I	N.D.	0.1
а-внс	μg/l	N.D.	0.1
β-внс	μg/l	N.D.	0.1
LINDANE	μg/I	N.D.	0.1
δ-внс	μg/l	N.D.	0.1
HEPTACHLOR	μg/I	N.D.	0.03
HEPTACHLOR EPOXIDE	μg/I	N.D.	0.03
α-ENDOSULFAN	μg/l	N.D.	0.1
β-ENDOSULFAN	μg/l	N.D.	0.1
DIELDRIN	μg/l	N.D.	0.03
ENDRIN	μg/I	N.D.	0.1
op'-DDD	μg/I	N.D.	0.1
pp'-DDD	μg/I	N.D.	0.1
op'-DDE	µg/I	N.D.	0.1
pp'-DDE	μg/I	N.D.	0.1
op'-DDT	μg/I	N.D.	0.1
pp'-DDT	μg/I	N.D.	0.1
Total biocides/ pesticides	μg/I	N.D.	0.5
1.12 Benzoperylene	μg/I	N.D.	0.3
Benzo(b)fluoranthene	μg/I	N.D.	
Benzo(k)fluoranthene		N.D.	
Indeno(1.2.3-cd) pyrene	μg/l	N.D.	
Total PAH except from Benzo(a)pyrene	μg/l μg/l	N.D.	0.1
Benzo(a) pyrene	μg/I	N.D.	0.01
Vinyl chloride		N.D.	0.5
Acrylamide	μg/l μg/l	N.D.	0.1
Epichlorohydrin Total alpha radiation	μg/l Bq/l	N.D.	0.1
		N.D.	
Total beta radiation	Bq/I	N.D.	0.10**
Radioactivity (total indicative dose) **	mSv/year	<0.10	0.10**
Whole coliform	cfu/100ml		0
Escherichia coli (E. coli)	cfu/100ml	0	0
Enterococci	cfu/100ml	0	0
Clostridium perfringens (including spores)	cfu/100ml	0	0
Colony count in 22° C	cfu/ml	0	No abnormal change
Colony count in 36° C	cfu/ml	0	No abnormal change

<sup>\*</sup> For the parameters taste and odour, which were organoleptically tested, the numbers mean: 1=threshold, 2=mild / \*\* For the indicative dose the parametric value results from thee JMD P/112/1057/2016 # For microbiological parameters, the median is used as a measure of central tendency. / N.D.: Not Detected

The data above resulted from sampling and analysis carried out in order to monitor the compliance of EYDAP's S.A. water supply quality with current legislation. Based on this monitoring, EYDAP certifies that the water quality of the water supply system is inspected and complies with the requirements and terms of the Ministerial Decision JMD C1/(d)/CP oik. 67322/2017 "Quality of Water for Human Consumption" in compliance with the European Council Directive 98/83/EC of the November the 3rd, 1998, as amended and currently in force.



# Sewerage Network



WWTP UNDER CONSTRUCTION
& OPERATED BY EYDAP

WWTP UNDER CONSTRUCTION
BY THE REGION OF ATTICA
TO BE OPERATED BY EYDAP

WASTEWATER PUMPING STATION

--- DRAINAGE COLLECTOR

CENTRAL DRAINAGE
COLLECTOR

SECONDARY
WASTEWATER NETWORK



3.975 millions Inhabitants



9,500 km Sewerage



Central Sewerage
Central Coastal Collector
Parakiphissios Collector
Supplementary Central Sewerage
Pipe Pressure Relief Eduction Pipe



Sewage
Sampling
at the inflows
and outflows of WWTPs



Accredited
Laboratories
for Chemical Analysis
of Sewage



12,000 wastewater samples 66,000 analyses in the Accredited Laboratories of EYDAP



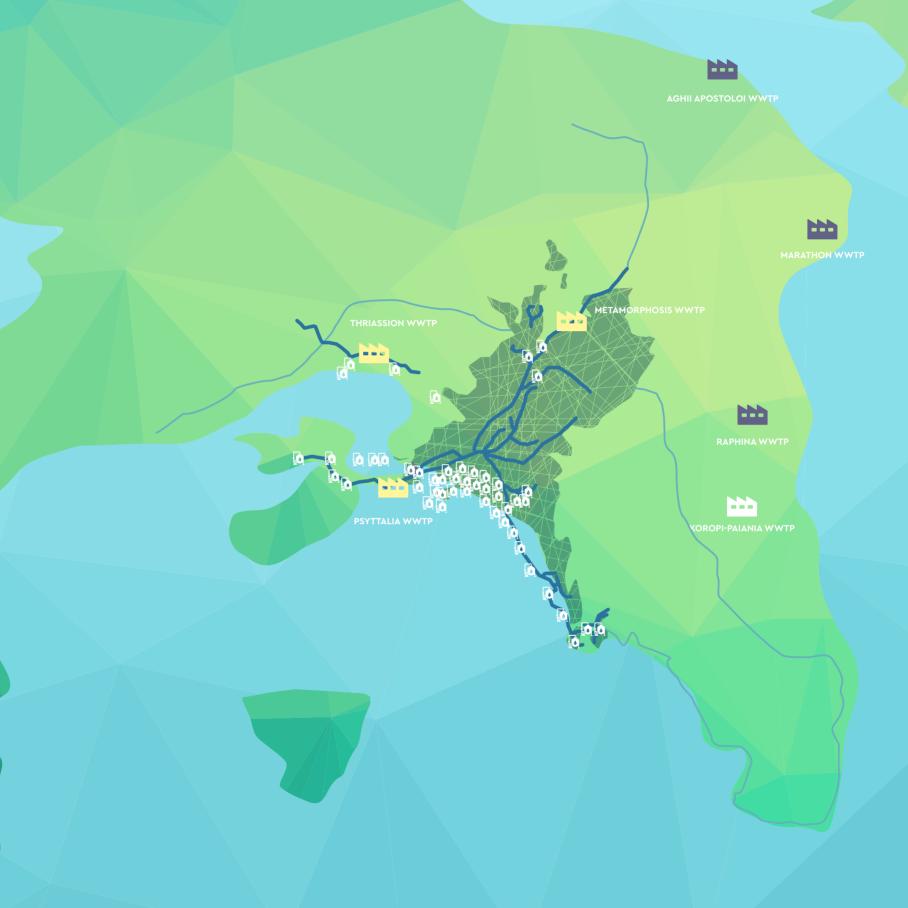
Checking of sewage in the Liquid Industrial Waste Network



755,500 sq.m.
wastewater
per day is treated
cumulatively in WWTP



3 Wastewater Treatment Plants (WWTPs)
Psytallia – Metamorphosis – Thriassion
Wastewater Treatment Plants in East Attica
with reuse of treated effluents



# 3.4 Consumers Health & Safety: **Sewerage Services of EYDAP**

GRI 103-1









# Why is it material?

# The Sustainable Development of Attica is firmly linked to responsible and efficient wastewater management.

Our main activity is our continuous and dynamic presence in this field, through our undeniable high know-how, with the main goal of protecting natural resources and continuously upgrading the guality of life of citizens, with a 9,500 km underground network extending from Aghios Stefanos to Salamis and from Varkeza to Mandra.

Sewerage projects, in which significant public and community resources are invested, are a basic infrastructure at the state level and an indisputable example of civilization and progress.

EYDAP today, as the largest company in Greece that operates in the water cycle, takes care of the collection and treatment of wastewater, so that they return to the environment free from their pollutant load. Applying the principles of the circular economy and use of the best international practices, we proceed to extensive projects for the collection and utilization of treated wastewater for irrigation purposes (projects of Eastern Attica) but also for the utilization of sewage sludge for energy production.

The identification and assessment of potential risks is a very important issue that the Company manages with particular care through the preparation of specific Business planning, being aware of their economic, social and environmental impact.

The main risks associated with sewerage issues are:

- environmental degradation in areas where there is a lack of sewerage network,
- inflow of sewage into buildings or escape of sewage into the environment (roads, streams) due to overflows or blockages of pipes.
- problems in the operation of WWTPs due to drainage in the network of wastewater unsuitable for disposal,
- burden on the marine ecosystem in case of improper wastewater treatment.

# Taking all precautionary measures, reviewing action procedures and continuously modernizing systems ensures the preventive and safe handling of any risks.

EYDAP, guided by the interaction of environmental pressures and Sustainability, constantly ensures the proper and uninterrupted operation of its facilities in its areas of competence, contributing to the achievement of goals 3 "GOOD HEALTH AND WELL-BEING" and 6 "CLEAN WATER AND SANITATION" of sustainable development, as set out by the United Nations.



GRI 103-2

# How do we manage it?

#### SEWERAGE NETWORK DESCRIPTION

The operation of EYDAP and especially the disposal and treatment of wastewater of homes, institutions, factories or other facilities in an **area is based on the provisions of Greek and European Legislation but also on corporate initiatives.** 

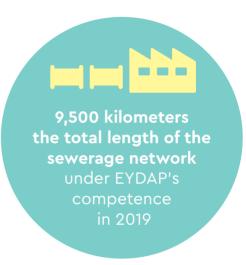
The Hellenic Republic, as a Member State of the European Union, is obliged to comply with the relevant Directives of the European Union. In particular, Council Directive 91/271 /EEC of 21 May 1991 provides that "Member States shall ensure that all settlements with an equivalent population of more than 15,000 have sewerage networks by 31.12.2000 at the latest, and for the settlements with an equivalent population from 2,000 to 15,000 at the latest by 31.12.2005". Failure to comply with the legislation, in addition to resulting in fines, poses serious risks to public health, pollution of soil, of groundwater aguifers and surface water.

EYDAP is responsible for the construction, operation and maintenance of the sewerage network in its area of competence, as defined by article 8 of law 2744/99 as in force today.

# The served population amounts to approximately 3,975,000 inhabitants.

The drainage of the Attica Basin is carried out with rainwater and sewage pipes.

However, according to the current legal framework, the responsibility for the design, construction, maintenance of **rainwater** drainage works and **flood protection** works in general, as well as for the **cleaning of water collection wells, belongs to the Region of Attica and to the local municipalities.** 



Our goal is to expand the network in areas that lack sewerage. EYDAP proceeds to the planning, design and implementation of projects in new areas, respecting the principles of circular economy.

The "sewerage network" in the area of responsibility of EYDAP, for which EYDAP is responsible, means the sewage pipes, the combined pipes (old mixed network in the center of Athens), the pumping stations, the eduction pipes, the overflow channels, and in general any work which aims at collecting and transporting wastewater to the final recipients and has been constructed by the competent authorities in accordance with the approved studies. Pipes and external branches of sewerage that have been constructed by third parties become part of the final sewerage network after being incorporated by EYDAP.

**Sewage pipes** are **gravity pipes**. But there are also **pipes** that operate **under pressure**. The sewerage system of the basin of Athens includes 44 pumping stations, mainly along the coastal collector of the Saronic coast.

The system is separate (sewage pipes – rainwater pipes), except in the area of the center of Athens, where the system is combined (pipes carrying both sewage and rainwater). The water collection wells of the combined system are thoroughly cleaned, especially during periods of heavy rainfall, to avoid flooding.

**Sewage is collected** through the pipes of the **secondary sewage** network of the sewage areas. The secondary network terminates in the transmission pipelines (**primary network**) and finally **in the main sewage collectors** (Parakiphissios, SKAA, KAA, KPS, collectors D and A in Thriassio, etc.) through which wastewater ends up in the **Wastewater Treatment Plants.** 



#### SEWERAGE NETWORK CONTROL AND MAINTENANCE

The maintenance of the network and the repair of the damages is done with continuous and immediate interventions, with the help of the highly trained personnel, the use of the appropriate equipment that is constantly updated according to the new technologies.

Damage to the network pipes (eg breaks) occurs during the construction of other projects, during the construction of connections by Municipalities that may be done with less than the necessary care or due to the ageing of the pipes or due to the entry of roots into the pipeline from adjacent trees. The result of the correct and continuous maintenance of the network, is the reduction of the failures that occur, a fact that is also ascertained by the indicators of the years 2017 (network failures: 26,325) -2018 (network failures: 25,957). It is estimated that for 2019 there was a further reduction of failures.

# Almost 90% of the network is in digital display, which contributes to the rapid response to any problems.

Problem solving and minimization of malfunctions is achieved by:

- use of high-tech **Mobile TV Control Units** (TV Inspection Vehicles) with all the necessary equipment for fault check and detection
- use of high pressure tankers in case of blockage or cleaning of pipes
- use of No Dig Technology through Television Inspection Vehicles equipped with robots for repair without excavation, in case of failures (breaks, corrosions) in the pipelines or in the branches
- rehabilitation / reconstruction of pipeline sections
- · maintenance of the electromechanical equipment of the pumping stations.

In 2019, in order to modernize and strengthen the available equipment, the process for the supply of

- 18 suction and high pressure tankers with water from sewage recycling
- 10 high pressure water tankers and sewage suction, with a total budgeted cost of 15,300,000 (plus VAT)

The relevant tender is in the phase of the signing of the contract (after the presentation of the letter of guarantee).

#### The inflow of sewage into properties or the escape of sewage into the environment (roads, streams) are due to:

- illegal connection of rainwater to the network
- blockages of pipes, usually from materials unsuitable for drainage.

In cases of sewage inflow into a property, the Company may compensate the owner if the legal procedure is followed and the case is investigated.

# WASTEWATER TREATMENT IN EYDAP'S COMPETENCE AREAS

The wastewater treatment in the areas of EYDAP's competence that currently have a sewerage network, is done in the three Wastewater Treatment Plants (WWTPs) in **Metamorphosis** (WWTPM), on the island of **Psytallia** (WWTPP) and in **Thriassio** Pedio (WWTPTP).

#### EYDAP takes care of:

- the optimal and uninterrupted operation of the WWTPs
- their continuous and correct maintenance
- their modernization with the required upgrade-improvement works
- the management of processing products with the most modern methods
- compliance with applicable environmental conditions
- compliance with acceptable output quality limits
- the observance of the principles of the circular economy (the issue is analyzed in detail in chapter 6)









It is one of the largest WWTP in Europe and internationally, with a sewage treatment capacity (average design supply) of 1 million m<sup>3</sup>/day.

In the WWTPP end up **urban and industrial wastewater** (after pre-treatment):

- The wider area of the Attica Basin, except for certain areas whose waste end up at the Metamorphosis Wastewater Treatment Plant,
- The broader Saronic Gulf (major Capital Region),
- The island of Salamis.

Channeled to the WWTPP will also be the sewage from:

- The areas of Pallini, Anthousa, Gerakas (rest) of the municipality of Pallini
- The areas of Kapandriti, Polydendri, Mikrochori of the municipality of Oropos
- The Varnava area of the municipality of Marathon

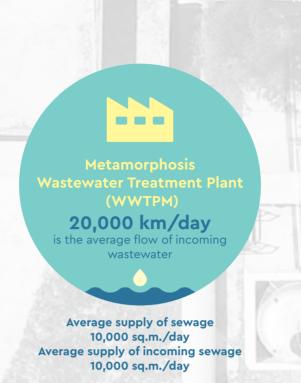
Advanced secondary biological treatment and sludge treatment is carried out at the WWTPP

(thickening, anaerobic digestion, dehydration, thermal drying of the sludge).

The sludge processing stage produces biogas, which is used for energy production. The dried sludge produced is used as fuel by the cement industry (further discussed in Chapter 6).

In the context of maintenance / optimization of its operation and for full compliance with environmental conditions, it has been designed:

- the project of storing pre-treated products with deodorizers,
- the project for the improvement of the overflow pipeline in Akrokeramos,
- the additional works for the removal and treatment-management of those floating (fats, etc.) from the Primary Sedimentation Tanks (PPC) and other points of the WWTPP.



It is a facility for the reception and co-treatment:

- of urban wastewater (northern suburbs)and domestic sewage (from areas of Attica lacking drainage network).
- non-hazardous liquid waste (Prefectural Decision of IMS/35809/1992, GG 682 b/20.11.92) from industries and companies that are licensed for this purpose by the competent service of EYDAP.

WWTPM has a treatment capacity (average design flow) of 44,000 km / day wastewater

(20,000 km / day of urban wastewater) and 24,000 km / day of urban sewage).

In the WWTPM end up-through the network-the sewage of the areas: Kryoneri, Aghios Stephanos, Anoixi, Drosia, Ekali, Dionysos, Kastri, Nea Erythraia and Nea Kiphisia.

In the WWTPM there is a secondary treatment of urban wastewater and sewage and sludge treatment.

The dehydrated sludge is transported by trucks for thermal drying to the WWTPP (the issue is further discussed in chapter 6).

The WWTPM is the oldest treatment facility.

Our goal is to optimize and modernize its operation with:

- improvement projects of the existing facilities in the Tanker Evacuation Area, (creation of more evacuation spots)
- implementation of deodorization projects that are particularly important for the region and the residents
- industrial waste treatment projects.

The implementation of these projects will proceed after the resolution of planning issues related to the area of the WWTPM facilities.



Thriassio Pedio
Wastewater Treatment Plant
(WWTPT)

5.500 m<sup>3</sup> per day

is the average supply of incoming waste water

# The WWTPT has been operating since 2012 and is the most modern WWTP

It is a complete solution to a long lasting problem of the Thriasio residents, but also of professionals operating in the wider region. At the same time, it contributes to restoring the balance of the ecosystem of the Elephsis Bay, which has been characterized as a sensitive recipient.

WWTPT serves the areas of Elephsis, Aspropirgos, Mandra, Magoula, and is capable of processing (average design provision) of 21,000 m<sup>3</sup>/day of sewage.

In WWTPT, tertiary treatment is performed, since in this case the recipient is sensitive, and the pollution load of the wastewater is removed at a rate of over 95%. The dehydrated sludge is transferred from WWTPT for thermal drying to WWTPP.

WWTPT, the 130 km pipelines and 3 pumping stations were constructed in the framework of the drainage works in the area to comply with the aforementioned Directive 91/271 / EEC on urban waste water treatment.

Despite the fact that WWTPT has been in operation since 2012 – given the economic crisis – the residents of the areas have shown a reluctance to join it, resulting in the European Commission imposing fines on the Greek State (European Commission Action to the European Court of Justice against the Greek State (Case C-328/16) due to non-execution of the WEU Decision of 24/6/2004 in Case C-119/02 "Biological Cleaning of a Thriasio Pedio").

To address the issue of fines imposed on the Greek State in the case of Thriasio (reduction, cancellation), EYDAP, in an effort to increase the number of property connections and the percentage of residents served, took the following actions:

- · Implemented a program to provide financial incentives to the residents of the area of Thriasio Pedio and specifically for the properties of pure household use, in order to be connected to the sewerage network, with the allocation of up to € 2,500 plus VAT per property, as well as the settlement of the above amount from EYDAP SA (for a period of six years maximum) with exemption for two (2) years from the sewerage fees of all properties that will be connected. This Program was implemented from the middle of 2014 and by Decision of the Board of Directors of the Company on 6.3.2019 was extended until 30.6.2019.
- Multiplied the connections in the Municipalities of Elephsis, Mandra Eidyllia and Aspropyrgos, through two contracts of EYDAP, with which were made, in 2017 and until May 2018 (when the contracts were completed), around 1,000 connections.

As a result of the above actions of EYDAP, in combination with parallel initiatives on behalf of the Municipalities of Thriassio for making connections, there was a significant increase of the incoming supply to WWTPT within 2019 and therefore of the served residents, which was estimated at 83% (second half of 2019).

#### **CONTROL OF SEWERAGE LIQUID WASTE OF INDUSTRIAL PLANTS**

The special obligations of **professional, and industrial activities** for disposal of liquid waste in the sewerage network in the areas of EYDAP's competence are regulated by the **Special Regulation of Operation of Sewerage Network** (Decision D16c / 381/5/44 / C of the Deputy Minister of Infrastructure, Transport and Networks, Government Gazette / B / 286 / 13.02.2012), in combination with the relevant JMDs.

EYDAP, in order to avoid the consequences of dumping unsuitable waste for disposal in the network, conducts **systematic sampling and checks** of wastewater entering the network, using modern methods and innovative technologies. The laboratory analyses of the samples are carried out according to all the rules of our **accredited laboratories in Akrokeramos and Metamorphosis.** 

The control of the drained wastewater by companies that have been licensed for disposal in the wastewater network is carried out by taking samples in random checks.

In 2019, a pilot sewer monitoring system was installed in the industrial zone network of the basin of Athens, using the detection and monitoring devices, in order to control the drained waste and to identify companies that are "polluting".

**Penalties** are imposed in case of exceeding the desired limits of the parametric values, as defined in the Special Regulations for the Operation of the Sewerage Network. These sanctions refer to: interruption of water supply, interruption of the connection of the company, imposition of Quality Excess Charge (TYP), repair of damages caused to the network or WWTP due to the inappropriate waste disposed in the network, at a cost charged to the company through the water bill.





#### LABORATORIES FOR CHEMICAL ANALYSIS OF SEWAGE

The laboratories are accredited by the National Accreditation System (NAS) according to the ISO 17025 standard - The official fields of accreditation of laboratories are included in the certificates with numbers 862-2 (Akrokeramos laboratory) and 856-3 (Metamorphosis Laboratories).

They carry out tests on samples of sewage, sludge and waste from:

- the entry-exit of the WWTP
- network pipes
- companies-industries, connected to the network or to be licensed for connection
- tankers transporting sewage to Metamorphosis WWTP
- properties in which there are possible damages related to sewerage
- the Environmental Inspectors for matters within their competence related to environmental pollution

The tests (BOD, COD, FAT & OILS, NH3, HEXAVALENT CHROMIUM, COLOR, SULPHIDES, METALS, TP, Tn, etc.) are carried out with correct application and observance of the chemical analysis procedures, based on European Committee for Standardization (CEN) standards in method of analysis.



The parameters examined, the limits that should not exceed the values of these parameters, as well as the frequency of measurements, in the case of control of the sewerage companies-industries are defined in the Special Regulation of Sewerage Network Operation, and in the case of WWTPs, are determined by the corresponding environmental conditions, the JMD oik. 576/400 (Government Gazette 192 / B / 14.3.1997) "Measures and conditions for the treatment of urban wastewater" and the Decision of the prefect of Piraeus oik. 8105 (Government Gazette 1030 / B / 24.7.2003) "Determination of surface water use as well as Special Conditions for Disposal of Sewage and Industrial Waste of WWTPP in the Saronic Gulf".

In 2019, in the context of the continuous upgrade of the laboratory equipment and the assurance of the reliability of the performed analyses, we proceeded in:

- the supply of a Mass Spectrometer system (ICP-MS / MS) costing 250,000 euros (plus VAT) and
- tenders for procurement of:
- a gas chromatography-sequential mass spectrometry system estimated cost 146,000 euros plus VAT
- a dual system Ionic Chromatography estimated cost 90,000 euros plus VAT
- spare parts for laboratory instruments at a total estimated cost of € 400,220 plus VAT

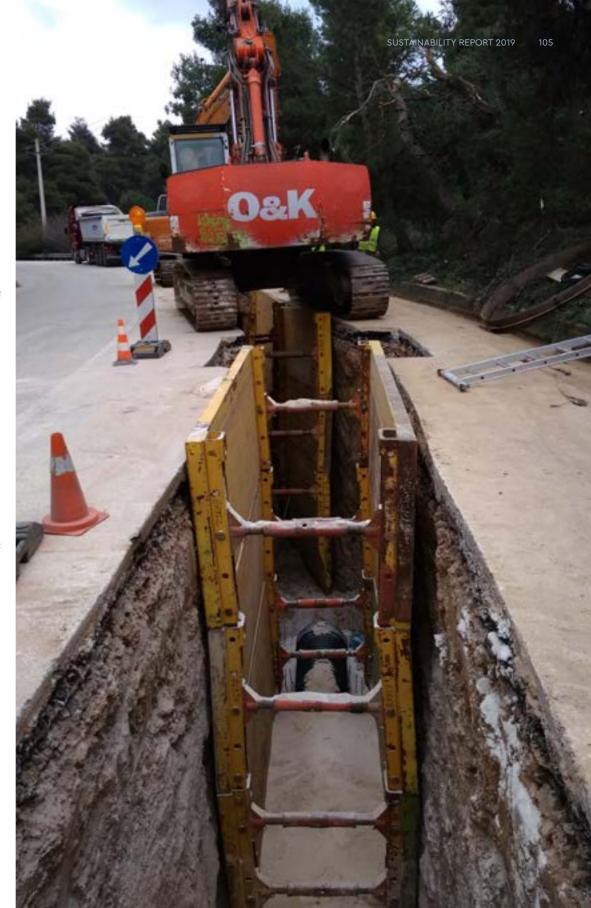
#### STAFF EDUCATION-TRAINING

# The sewerage staff working in very unfavorable and unhealthy conditions

(in wells and pipes with release of gases dangerous to health, etc.), it is absolutely necessary to be constantly trained in order to respond in the safest and best way to his duties.

#### The training is done with:

- Seminars on legislation, with the network, the problems that arise and how to deal with them, the use of available equipment for the control, maintenance and repair of network failures, the use of personal safety equipment (PSE).
- Practical training of the technical staff related to the use of control equipment, maintenance, etc. network and the use of PSE.
- Participation in exhibitions related to sewerage materials, maintenance equipment, innovative sewerage and wastewater treatment technologies.

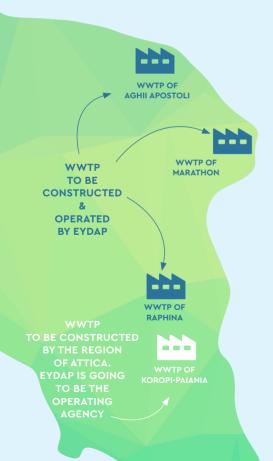


GRI 303-1 (2018), GRI 303-2 (2018)

# EYDAP PLANNING FOR SEWERAGE IN REGIONS OF EASTERN ATTICA

In 2019, significant progress was made in the maturation of sewerage projects in Eastern Attica. EYDAP's planning for these important sewerage projects aims at the integrated wastewater management of the area, with the possibility of reusing the treated effluents for irrigation purposes and for suburban use.

Completion of projects, in addition to regulatory compliance with Directive 91/271 / EEC, will be an effective factor in ensuring the sustainability of the precious water resource, upgrading the marine environment and the aquifer, protecting the health of the inhabitants and enhancing the development of the area.



# EYDAP designs and implements the following sewerage projects in Eastern Attica:

- Collection, Treatment of urban wastewater of the Municipalities of Raphina –
   Pikermi and Spata Artemeda and Reuse-Disposal of treated effluents
- 2. Collection, Treatment of urban wastewater of the **Municipality of Marathon** and Disposal of treated effluents
- 3. Construction of a sewerage network in the **Glyka Nera area of the Municipality** of Paiania
- 4. Collection, Treatment of urban wastewater of the **Municipality of Saronic** and Reuse-disposal of treated effluents
- 5. Reuse of Treated effluents of the Wastewater Treatment Plants (WWTP) of East Attica
- 6. Master Plan for the management, final processing and utilization / disposal of the produced biosolids of the WWTPs of East Attica
- 7. Drainage of dirty areas of **Leontari Kantza, Kato Balanas and Aghios Nikolaos Municipality of Pallini**.

Environmental benefits from the implementation of the projects

### → Water resource protection

The reuse of WWTP outputs, for EYDAP is a strategic choice in the design and implementation of projects. WWTPs are designed to operate with state-of-the-art technology, ensuring the reuse of the treated effluents for the irrigation needs of the Municipalities during the summer period, as well as for urban-suburban use in the Municipalities of Raphina – Pikermi and Spata – Artemeda, in full harmonization with the current institutional framework for reuse

## → Ecosystem protection

The implementation of the projects is expected to upgrade the **swimming shores**, with direct positive consequences for **fishing** as well.

Reduction of the energy footprint of the projects

The significant reduction of GHG greenhouse gas emissions

in the wider area is valued as a very important result of the implementation and operation of the projects.

During the operation of the projects we aim at the:

- reduction of energy consumption, through the application of new technologies and high level automation systems, which allow the detailed control and optimal regulation of processes, with a positive result in the resulting operating costs. The design of WWTPs envisages the possibility of regulating the operation of the basic equipment and the continuous monitoring of the operation through a modern remote control system (SCADA) to limit energy consumption.
- **Use of RES** to cover part of the energy consumption of Raphina-Pikermi and Spata-Artemeda WWTP

The utilization of the **produced biogas** is foreseen as well as the installation of **photovoltaic** panels on the free surfaces of the WWTP.

of the underground aquifer

The operation of the sewerage works in the region of Eastern Attica will achieve the drastic reduction of the operation of the sewers, most of which are absorbent and their use burdens the groundwater with a significant pollutant load.

Upgrading the water system

The reuse of the treated effluents for irrigation will reduce pumping from the groundwater aguifer and therefore **limit the salinization of the water system.** 



# ENVIRONMENTAL AWARENESS AND INFORMATION CENTER at the Municipalities of Rafina-Pikermi and Spata-Artemis WWTP facilities.

All the environmental benefits that result from the projects will be **enhanced** by the operation of the **Center**, in which the following will be implemented:

- pilot applications for the optimal utilization of the recovered water
- environmental information and education actions

For the full integration of the project in the natural environment, places of recreation and development of activities will be created, in addition to extensive green plantations with various bioclimatic elements.





#### COOPERATION OF EYDAP WITH THE MUNICIPALITIES INVOLVED

EYDAP is in constant cooperation with the competent Municipal Authorities, both to inform them and to ensure their active contribution to the development and completion of sewerage projects, for the benefit of residents and visitors to the area.

**EYDAP,** in the context of the actions for the rapid implementation and operation of sewerage projects in Eastern Attica and the avoidance of problems and delays arising from the multi-division of responsibilities for the construction of sewerage projects:

- adopts for the first time a holistic approach in the construction of all the individual parts of the projects
- undertakes the simultaneous **construction of the secondary sewerage network** and the corresponding **external branches** to connect the properties, the construction of which belongs to the local municipalities based on the existing legislation
- plans actions, in cooperation with the municipalities involved, for the faster connection of the properties to the sewerage network as soon as the construction is completed
- created, in collaboration with the Municipality of Paiania, a service office for property owners at the Municipal Building of Glyka Nera for the provision of information and submission of applications with the required supporting documents for the connection of their properties with the sewerage network of EYDAP that is under construction. Possibility of submitting an electronic application is also provided via the internet from a special page created for this purpose on EYDAP's website.



In 2019, significant progress was made in the maturation of sewage projects in Eastern Attica.

- The construction of a sewerage network at Glyka Nera of the Municipality of Paiania has started. The construction contract of the project was signed on 23–5–2019 with a completion time of two (2) years. The project is co-financed by the OP "Attiki 2014–2020".
- Two Program Contracts were signed, one between the Municipality of Raphina Pikermi and EYDAP and one between the Municipality of Spata Artemeda and EYDAP for the inclusion in the contracts of the sewerage networks to be constructed by EYDAP and the construction of external branches that will connect the properties to the network.
- The Technical Act Bulletin of the EYDAP Beneficiary was submitted by EYDAP to the EYDEP of the Region of Attica for the inclusion of the act "Collection, Treatment of Urban Wastewater of the Municipalities of Raphina Pikermi and Spata Artemeda and reuse-disposal of treated effluents" to the "Transport Infrastructure, Environment and Sustainable Development 2014–2020" Operational Programme. The project includes four (4) contracts, one for the WWTP in the area of Plati Chorafi and three for the sewerage network (including the external branches to connect the properties). The project also includes accompanying sub-projects (Expropriations, Displacement of OKO networks, Archaeological works, Management of AEKK) as well as the sub-projects of Technical Consultant and Publicity. By Decision of the Attica Regional Governor, the project for financing was included in the Priority Axis "CONSERVATION AND PROTECTION OF THE ENVIRONMENT PROMOTION OF EFFICIENT USE OF RESOURCES". "Transport Infrastructure, Environment and Sustainable Development".
- EYDAP received the responsibility for the construction of the secondary sewerage network and the external branches, through a Program Contract signed with the Municipality of Marathon.
- The Technical Act Bulletin of the **EYDAP** Beneficiary was submitted by EYDAP to the EYDEP of the Region of Attica for the inclusion of the act "Collection, Treatment of urban wastewater of the **Municipality of Marathon** and Disposal Reuse of treated effluents" for funding. The project includes **two contracts, one for a WWTP and one for the sewerage network** including the **external branches** to connect the properties. The project also includes accompanying sub-projects (Expropriations, Displacement of OKO networks, Archaeological works, Management of AEKK) as well as **the sub-projects of Technical Consultant and Publicity**. By Decision of the Region of Attica, the inclusion for financing in the Operational Programme "Transport Infrastructure, Environment and Sustainable Development 2014–2020" was approved.
- Involuntary expropriations of 11,700.30m² and 4,161.34m², respectively, were declared for the construction of pumping stations in the Municipalities of Raphina Pikermi and Spata Artemeda (with 2963 / 27–08–19 and 2962 / 27–08–19 JMD Finance Infrastructure and Transport).
- Involuntary expropriation of an area of 45,182.60 m<sup>2</sup> was declared for the construction of the Marathon WWTP (with the 1849 / 27–08–19 JMD of Finance Infrastructure and Transport).

- The Board of Directors of EYDAP **approved the Tender Documents of two contracts** for the Construction of Sewerage Networks and Sewerage Transport Pipelines in areas of the **Municipalities of Raphena-Pikermi and Spata-Artemeda**. The auction of the two contracts was announced on 10.2.2020 and is already in progress.
- EYDAP proceeded to the preparation of a study to check the adequacy of the existing central sewers and the WWTP Koropi Paiania for the sewerage of the areas Leontari Kantza, Kato Balana and Aghios Nikolaos in the Pallini Municipality recipient being the Paiania Koropi WWTP.
- EYDAP, in the context of water resource protection, signed a **Cooperation Agreement with the Agricultural University of Athens** in Spata for the implementation of a pilot program in order to demonstrate and highlight the use of processed WWTP outputs and at the same time inform **municipal agricultural agencies in Spata Artemeda and Raphena Pikermi** for the possibilities of restructuring of the crops that emerge from the use of the recovered water.
- Also for the reuse of the processed outputs, the signing of a memorandum of understanding and cooperation was prepared (signed 21.1.2020) between the Governor of Attica, EYDAP and the Mayors of Raphena and Spata Artemeda, for the commitment to contribute to the planning, pilot application and implementation of the projects for the reuse of the outflows of Raphena Pikermi and Spata Artemeda WWTP, which is a strategic choice of EYDAP for the Eastern Attica WWTPs.
- For the urban wastewater collection and treatment projects of the Municipality of Saronic and Aghia Marina and Aghios Dimitrios of the Municipality of Kropia, EYDAP is in the stage of a multi-criteria study to explore alternatives for the collection, transport, treatment, disposal and reuse of wastewater. The study will highlight the optimal solution and finalize the sewerage design in these areas.

EYDAP, committed to the implementation of innovative sewerage projects, ensures on the one hand the social consensus in the areas where it invests in new infrastructures and on the other hand contributes to the achievement of Goal 9 "Industry, Innovation and Infrastructure", as defined by the United Nations.



#### How do we evaluate our approach?

The evaluation of the efficiency of the management of the sewerage system is done with the development of the following applications and practices, some of which are **important innovations** for the operation of the sewerage system:

1. Checking of the marine ecosystem of the Saronic Gulf and the Gulf of Elephsis and evaluation of the results, in collaboration with an independent research body (ELKETHE).

The evolution of the ecosystem of the Inner Saronic Gulf and the Gulf of Elefsina is monitored, under the influence of the Psytallia Wastewater Treatment Plant and the Thriassio Pedio Wastewater Treatment Plant (as provided in the current environmental conditions of the WWTPs) with the implementation

of relevant programs by the Hellenic Center for Marine Research (EL.KE.th.E.) through contracts with EYDAP (seven consecutive programs have been funded since September 2005 by EYDAP for this monitoring).

ELKETHE carries out measurements, sampling and analysis of various parameters of the water column in the context of the Program. Based on the collected data, the ecological status of the Inner Saronic Gulf, the Gulf of Elephsis and the Bay of Keratsini is reflected, possible changes in certain characteristics of the ecosystem are investigated in relation to the past and the impact of the effluent and ecological and food condition of the areas is assessed.

The results show a continuous improvement of the ecological condition of the Saronic Gulf, the Gulf of Elephsis, especially at the points of the estuary of the WWTP.

The treated effluent of WWTPP is diffused in the Saronic Gulf through deep diffusion pipes with reduced organic load of wastewater by approximately 93% and nitrogen by 80%.





# 2. Publication of the results of wastewater treatment in the National Database of the Ministry of Infrastructure and Transport.

Quantitative and qualitative characteristics of the inputs and outputs of the wastewater treatment centers are published in the electronic Database of the Special Secretariat for Water. The characteristics that are published are the following:

- Incoming supply
- · Incoming load
- · Quantity of sludge produced
- BOD5, COD, SS, T-N, NH4-N, T-P (input)
- BOD5, COD, SS, T-N, NH4-N, NO3-N, T-P (output)

Access to the database is free for all citizens.

#### 3. Development of Sewerage Projects

In order to ensure the sewerage of all areas that are under the competence of EYDAP and are currently deprived of sewerage, EYDAP, in cooperation with the Municipalities, proceeds to the planning and study of the required sewerage projects and Wastewater Treatment Plants. In this context:

 In October 2019, the project of sewerage collectors in the areas of Dionysos, Rodopolis, Anoixi and Stamata of the Municipality of Dionysos was completed, with a budget of 1,844,445 euros and a funding of 92%. The project was included in the Operational Programme "Attica 2014-2020", in the Priority Axis "Improving the Quality of Life in the Urban Environment" and was co-financed by the European Regional Development Fund.

- The Final study was prepared for the sewerage projects of Kalamos and Aghii Apostoli of the Municipality of Oropos and for the sewerage projects of Kapandriti-Mikrochori-Polydendri of the same Municipality and the procedures for their inclusion for financing and their implementation are proceeding.
- The tender for the sewerage works of areas of the Municipality of Pallini (construction of the primary, the secondary sewerage network as well as the tertiary network) is in progress since December 2018, with a budget of 60,000,000 euros, which has been included for financing in the Ope-

rational Programme "Transport Infrastructure, Environment & Sustainable Development" 2014–2020, PRIORITY AXIS 14 "Preservation and Protection of the Environment – Promoting the Efficient Use of Resources" (COHESION FUND).

The bidding procedures of the projects (preparation of bidding documents in accordance with the current legislation, holding a tender for the nomination of a contractor) are particularly time-consuming, due to continuous amendments to the law and court engagements following appeals by the participating economic agents, the result being that the nomination of a contractor and the signing of the relevant contract taking place after the lapse of a long period of time – more than one year in many cases – from the publication of the tender documents.







#### 4. Use of Information Systems

The high requirements of EYDAP in terms of information systems and the need to respond to the acquisition of reliable digital information, led the Company to install new, and to the continuous improvement of existing, Sewerage IT Applications.

#### Information systems used and Actions developed:

- Workshop Vehicle Fleet Management for Emergency Response Information System (e-TRACK).
- Input and processing of data resulting from the works of the repair teams of the Sewerage Network Division, in the Sewerage Portal application.
- Pilot application, of on line Update of the Fault Application of the Sewerage Portal with field data.
- Two-way Interconnection of e-TRACK Systems and Sewerage Portal for direct forwarding of signals to vehicles of all Sectors.
- Import, processing and analysis of spatial network data in GIS environment.
- Compilation and study of statistical analyses based on the aforementioned data and those from the 1022 Complaints Center in the Sewerage Portal application.
- Monitoring the operation of pumping stations with Remote Control Telemetry (SCADA) systems. It is a system that monitors, controls and ensures the automated operation of pumping stations through the control of sewage level.

## 5. Control of inputs and outputs in WWTPs with continuous sampling and microbiological analyses in the laboratories of EYDAP.

Sewage sampling is planned, according to the needs and the current legislation, at the entrance and exit of WWTPs, as well as in the intermediate stages of treatment, followed by microbiological analyses to determine the quality of the incoming and treated wastewater, in order to evaluate the operation of facilities and compliance with environmental conditions. Specifically, for some parameters analysis is performed on a daily basis (COD, TSS) while for others on a weekly basis (eg metals).

In 2019, the number of samples analyzed in the laboratory of Akrokeramos amounted to 6,500 with the corresponding analyses reaching 40,000, while the number of samples analyzed in the laboratory of Metamorphosis amounted to 5,500 with the respective analyses reaching 26,000.

From the results of the analyses, it appears that the limits set by the environmental conditions of WWTPs concerning the quality of the outputs are observed.

# 6. Results of checks of sewage in the network of liquid industrial waste through sampling and chemical analysis of wastewater and liquid industrial waste, in the laboratories of the General Division of Sewerage.

Based on the results of the checks and given the number of the companies (more than 10,000) it is concluded that they generally comply, as the imposed sanctions are minimal, taking into account the sanctions imposed the years up to 2018, as for 2019 they have not yet been issued (eg within 2018, they concerned 5 companies).

## 7. Measurement of incoming flow in Thriasio WWTP

Following the actions taken by EYDAP in the area of Thriasio (financial incentives for residents and contractors for the construction of connections), there is a continuous increase in the supply entering the WWTP. Specifically, according to the data of previous years:

In 2015 the average daily flow was 2,100 km/day, in 2016 it was 2,400 km / day, in the last quarter of 2017 it was 4,000 km / day, in the second half of 2018 it was 4,500 km / day, while the year 2019 reached 5,500 km / day.

# 8. Issuance of e-pass to the sewage transport tankers at Metamorphosis WWTP

In the context of the rational management of the checking system but also of the faster service of the tankers trans

porting urban and industrial waste-water entering WWTPM, in February 2018 a new electronic checking system (e-pass) was installed. Vehicles enter the Center using a prepaid card, even on public holidays. In 2019, 23 new transceivers were issued.

## 9. For optimal management of processing products:

- the study has been completed and an application is being implemented for the on-site treatment – in a compact unit – of the incoming wastewater in a pumping station of the Central Coastal Collector and the reuse of the treated effluent for irrigation of the Elleniko Park.
- solutions are being examined for the management of the sludge produced in the WWTP, on site, for the production of materials that can be used as alternative fuels.
- In WWTPP there are also cogeneration units of electrical and thermal energy, which operate on biogas and natural gas combustion. The generated electricity is consumed by the WWTPP itself, usually in its entirety, while any excess is exported to the power grid.

#### 10. Social assistance initiatives

- EYDAP, in order to ensure the health
  of the citizens, upon request, intervenes even in areas outside its competence given its know-how and the
  specialized means at its disposal.
- EYDAP interventions are made in cases of emergencies to protect the life and

health of citizens, such as in cases of heavy rainfall with the provision of equipment and personnel in the effort to deal with floods.

- · According to the current legal framework, pipelines with a diameter of more than 30cm are constructed by EYDAP, while the secondary pipelines with a diameter of up to 30cm as well as the connections of the properties to the network, are constructed by the Municipalities. However, in some cases (eg in case of impossibility of construction by the Municipalities), EYDAP also proceeds with the construction of connections of properties and secondary pipelines, after signing a program contract with the respective Municipality. The signing of a program contract is imminent
- with the Municipality of Kifissia for the construction of pipelines and connections in areas of Kifissia and
- with the Municipality of Oropos for the construction of pipelines and connections in the areas of Kapandriti, Mikrochori, Kalamos and Aghii Apostoli.

In the reporting period,
there were no cases
of non-compliance with
regulations and voluntary codes,
which concern the effects
of EYDAP services on the
health and safety of citizens.



## 3.5 Affordable Pricing **Customer Service**

GRI 103-1











#### Why is it material?

The main product of EYDAP is the provision of Water Supply and Sewerage services to residential customers, professionals and large companies in the region of Attica, but also the supply of water to Municipalities, strengthening their Network. The provision of these Services falls within the broader context of customer service.

Customer care, information and satisfaction of requests is a key concern for the Company and a shared concern for service improvement, taking into account the transition to a digital age and the need to reduce our environmental footprint. For these reasons, customer-centric approach is strengthened, surveys are conducted and complaints / requests are considered, taking into account the needs of the customer.

#### How do we manage it?

GRI 103-2

"Customer Identification" optimization project

The strengthening of the customer-centric perspective of the Company includes continuous internal adjustments that stem from the constant understanding and satisfaction of customer needs and are related to the improvement of customer service experience.

Primary necessity for the Company is the improvement and development of its client portfolio. With the optimization project of the General Division of Customers on "Customer Identification" which started in 2019, the Company aims to update its customer database so that it includes correct and valid information, not only now but also in perpetuity with clearly defined procedures and methodology for continuous updating of customer registry data.

Part of the project was the highlight of information that is to be integrated in the Company's systems and the procedures that are to be designed. At the same time, through an analysis of debts to the Company, information on the effectiveness of the Company's actions regarding the reduction of overdue debts of customers was revealed.

The achievement of quality customer service and optimal request management raises the need for both specific and integrated processes and actions with the use of digital services. It is worth noting that since 2018 to the end of 2019, the Company initiated the installation of 1,200 new Smart meters with a diameter of 2' or more to Large Customers' installations, offering the possibility for automatic recording and reception of readings through GPRS. Readings and data from these connections will be transferred on a daily basis to the Central Billing and Customer Service System (BCC) for further action, as well as to the EYDAP site for information, service and online access to the Customer.

In an ever-changing environment, an excellent customer experience is critical to a company's long-term success. Our goal is customers to receive value not only from service provided but from their overall Company experience.

The Company constantly trains its staff so that it can easily and simply service customer, following the technology and the needs of customers that are constantly changing.

The Company takes care to comply with current Legislation, for the protection of consumers and continuity of actions' implementation undertaken in previous years regarding the upgrade of the quality of customer service.



## CONTRACT WITH THE GREEK STATE

From the fiscal year 2004 the conclusion of a written agreement as defined in article 15 of the contract from 9.12.1999 between the Greek State and the Company is pending, which will determine the price of raw water.

In the absence of a written agreement, the Company continues after 30.06.2013, to counterbalance the price of untreated water with the maintenance and operation services offered for the fixed assets belonging to EYDAP Fixed Assets, while at the same time the terms of the agreement are being consulted with the competent bodies.

Given that the duration of the above Contract between EYDAP and the Greek State expired on 25.10.2019, in view of the renewal of its exclusive right to provide water and sewerage services in its geographical area of competence, the existing contract was initially extended for 6 months, i.e. until April 25, 2020 and then extended until December 31, 2020.

## TARIFF POLICY

EYDAP's pricing policy follows the changing needs of its customers both in the provision of a flexible price list and in the discount policy. The provision of an affordable pricing for Services enables the basic needs of the customer to be met. In terms of the affordable pricing that it provides to its customers, the Company forms a comprehensive framework and proposes strategic policies and management and checking procedures related to it.

At the same time, the scalable pricing prevents waste of resources and contributes to the achievement of the UN Sixth Sustainable Development Goal "CLEAN WATER AND SANITATION", which refers to access to clean water and sanitation for all citizens.

On 22/05/2017, the National Water Committee issued the 135275 Joint Ministerial Decision (Government Gazette 1751B / 22.05.2017) for the "Approval of General Rules for the costing and pricing of water services. Method and procedures for recovering the cost of water services in its various uses ". The above Joint Ministerial Decision defines the procedures, methods and levels of recovery of the cost of water services, with the aim of boosting the economy as well as the general rules of costing and pricing of water services, in order to ensure the supply of affordable water of appropriate quality and quantity to consumers.

According to the above Ministerial Decision, the determination of tariff to the end users, in addition to the environmental cost, the cost of the resource is included. The environmental fee must be indicated in a distinct, clear and comprehensible way. In 2018, the work of the competent Committee was completed. The object was the implementation of the above Joint Ministerial Decision in EYDAP. The deliverables of the Committee is the prerequisite for the determination of the proposed Tariff of the Water Supply and Sewerage Services of EYDAP SA, a determination that will follow the determination of the price of the untreated water by the Greek State.

Change in the pricing of Water Supply and Sewerage services will be brought about by the implementation of JM 135275 (no. 3, par. 9), Government Gazette 1751 / 22.05.2017 "Approval of general Rules for costing and Pricing of water services. Method and procedures for recovering the cost of water services in its various uses".

Since 16/12/2013 the billing for water supply and sewerage services of the Company is determined based on the Government Gazette 3188B / 16.12.2013 and is as follows:

#### **Water and Sewerage Services Tariff**

TARIFF CATEGORIES	MONTHLY CONSUMPTION (m³)	€/m³		
TARIFF CATEGORIES	WATER SUPPLY SERVICES (effective since 16.12.2013- Gov.gaz. 3188B/16.12.2013)			
Category I				
GENERAL TARIFF-DOMESTIC USE	0-5	0,3500		
	5-20	0,6400		
	20-27	1,8300		
	27–35	2,5600		
	over 35	3,2000		
	* Implementation of minimum consumption 2m³/ month, suspension in case of water meter removal			
Category II				
	Up to 1.000	0,8300		
INDUSTRIAL-PROFESSIONAL	Over 1.000	0,9800		
	*Fixed consumption 100m³/month			
Category III				
PUBLIC-MUNICIPAL-PUBLIC INSTITUTIONS	Regardless of monthly consumption	0,9800		
Category IV				
CHARITY	Regardless of monthly consumption	0,2300		
Category V				
BULK WATER SUPPLY TO MUNICIPALITIES/COMMUNITIES -ISLANDS' WATER SUPPLY	Regardless of monthly consumption	0,4800		
Category VI				
SHIP SUPPLY	Regardless of monthly consumption	2,4000		
Category VII				
FIRE INSTALLATIONS	Regardless of the building size (m³) and tariff category	11,0100		
Category VIII				
RAW WATER	for the entire consumption by the customers of this category	0,1804		
STANDING CHARGE				
	Up to 30m³/quarter	1,0000		
WATER METER UP TO 5/8" AND 3/4"	30 up to 60m³/quarter	1,0000		
	over 60m³/quarter	1,0000		
WATER METER UP TO 1"		4,5000		
WATER METER UP TO 1 1/2"	monthly -for industrial-	4,5000		
WATER METER UP TO 2"	professional connections	13,0000		
WATER METER UP TO 3"	and for municipality	13,0000		
WATER METER UP TO 4"	network support	35,0000		
WATER METER UP TO 6"		35,0000		
SEWERAGE CHARGE				
HOUSEHOLDS	75% x water price (52,5% for gardens exceeding 200m²)			
PUBLIC-REGULAR	75% x water price			
CHARITY	75% x water price			
INDUSTRIAL	75% x water price			
	37,5% over the water price for distillery, ice industry, paper making industry, arti	ficial silk industry, construction sites		
VAT				
VAT 13%	Since 17.12.2010 13% over the water price (L.E.3899/2010 Gov. gaz. 212A/17.12.2010)			
VAT 24%	Since 01.06.2016 24% over standing charge + Sewerage charge (L.E. 4389/2016 Gov. gaz. 94A/27.05.2016)			



#### **SPECIAL BILLING**

EYDAP, based on a legislative provision (Government Gazette 552B / 26-3-2009, article 3.2.3, Government Gazette 3188B '/ 16-12-2013, Government Gazette 2221B' / 9-9-2013) issues invoices for special categories of consumers, such as companies, charities, Hellenic Petroleum, ship supply service providers.

Acknowledging its role as the only water provider in the basin area, for businesses, to support and help them develop, an Industrial / Professional tariff has been granted for 3,907 connections. In 2019 it was granted to 251 water connections.

The **charitable tariff** is provided, not only to institutions and associations within the purview of P.D. 1111 of 8 / 11.2.72 and of Law 2039/1939, but with a decision of the Board of Directors in other institutions – bodies that carry out philanthropic – public benefit work.

In 2019, 150 connections benefit of the «Charitable» tariff (new or renewed).

The category **«Bulk Water Supply to Municipalities & Communities-Water Supply of Islands»** refers to water provision according to the quality procedures of EYDAP. This category also applies to the off-city plan areas until the completion of the Urban Reconstruction Operation of Municipalities. It also applies to the supply of water to the islands, after an agreement of EYDAP SA with the Ministry of Shipping and the Aegean. Beneficiaries of this category are **in total 415** of which one was granted in **2019.** 

The **«Ship Supply» tariff** is a category for the water supplied to the Piraeus Harbour Organization, to the Hellenic Refineries of Aspropyrgos SA. to Natural or Legal Persons that operate under Public or Private Law. This tariff was granted to **62 beneficiaries**.

#### **EXTRAORDINARY SPECIAL TARIFF**

From 1/2/2016 until 30/06/2017, the beneficiaries of law 4320/2015 were granted an Extraordinary Special Tariff which provided for free (with 100% discount) 6 cubic meters of water per quarter to each household with one or two members, while for each additional member in addition to the two, the free supply amounted to 3 cubic meters of water.

From 01.07.2017, the Company initiated an Extraordinary Special Tariff to the beneficiaries of Social Solidarity Income of law 4389/16, providing a 100% discount on the value of water of 2 cubic meters per month, per household member, starting from the first step of the General Tariff and quantity of 3 cubic meters per month for each household member with a disability of more than 67%.

#### 11,602 beneficiary households

by the above regulations until 31/12/2019, in comparison to 9,172 households until 31/12/2018

**20.94% increase** 

#### **CUSTOMER DEBTS**

Despite the general economic crisis affecting households, the overdue debts of customers, with a systematic and persistent effort are kept at about the same level as last year, but always lurks the risk of them swelling.

The annual total billed water consumption for 2019 amounts to 295,992,138 cubic meters while for 2018 it amounts to 294,511,032 cubic meters. Extensive reference to the distribution of consumption is made in the Report of the Board (subsection «Overview of Activities – Evolution of water consumption and billed revenues from the sale of water & the use of sewers») which is published on the Company's website www.eydap.gr and on the website of the Stock Exchange www.helex.gr.

EYDAP, recognizing the unfavourable economic situation the Greek society is experiencing and in the context of its long-term contribution to society as a whole, is constantly taking initiatives to alleviate the economically weaker groups.

#### **DISCOUNTS**

EYDAP, as a Company with social sensitivity and practical contribution to the Greek family, recognizes the difficulties of large families and with institutionalized decisions of the Board of Directors, provides a discount on their bills.

## 11,813 water connections

serving large families by the end of 2019 versus 12,765 in 2018 **8.06% reduction** 

> 520 elderly beneficiary households

by the relevant discount, until 31/12/2019 against the 484 of 2018

6.92% increase

Discounts, with specific procedures, approved by relevant decisions of the Board of Directors and reflecting the Company's sensitivity to customer satisfaction are **provided in the increased consumption bills**, as well as in the bills of water theft, taking into account social and income criteria. In 2019, the total value of the discount provided by account reductions amounted to € 5,874,058.28 compared to € 5,828,716.63 in 2018, an increase of 0.77%.

#### **DEBT REPAYMENT ARRANGEMENTS**

By the BoS Decision, EYDAP has established specific procedures for the settlement of overdue debts, providing payment facilitations for connections serving the **weakest social groups** (beneficiaries CTO, EET).

By the Decisions of the Board of Directors of 2016 and 2017 the exemption of surcharges and interest was abolished, enforcement of payment was suspended, but the interest-free arrangements for the beneficiaries of EET and CTO were maintained.

In 2019 the number of debt settlement was 23,110.

#### PEOPLE-FOCUSED ORIENTATION

In the context of communicating with the client, EYDAP sends informative letters on the water connection, on existing overdue debts, on water interruption, on cancellation of settlements and on the forwarding of cases to the Legal Department. **321,563** letters of this nature were sent in the year **2019**, less than the 462,475 of 2018.

**Through the bill,** EYDAP provides useful information for the client, in addition to the analysis of his account.

EYDAP in case of increased water consumption, over 90m³ and with a different of 50% in comparison to last years' corresponding consumption, EYDAP for the immediate notification of the customer pastes a special notes at the entrance of the building.

In the context of its **social policy**, EYDAP successfully continued the implementation of **specially designed accessibility** services for visually impaired people, i.e. posting of specially designed water bills accounts (in braille, large fonts), sending sms and e-mail.



Customers are provided with services for all issues in all 12 Regional Centers located in the wider area of the Capital, facilitating communication with the Company.

The Company offers the alternative; 20 administrative procedures to be processed through the Citizens' Service Centers (KEP). In detail, these procedures are:

- 1. Change of name in the water consumption account.
- 2. Registration of the tenant's info in the consumption account by the owner or the tenant of the property.
- 3. Correction of property address.
- 4. Check incorrect meter number.
- 5. Issuance of a certificate for water supply of a property.
- **6.** Issuance of a certificate for the existence of a fire fighting connection on the property.
- 7. Issuance of a Copy of Water Supply Contract.
- 8. Check meter leak.
- 9. Pipe check.
- 10. Lowering of pipe.
- 11. Lifting of pipe.
- 12. Issuance of a certificate after checking the network operating pressure.
- 13. Verification of damage to property due to failure to EYDAP's water supply network.
- 14. Moving of water connection from spot within the plot to the sidewalk.
- 15. Deprivation of water supply due to frequent failures in the network.
- 16. Moving of water connection from the road to the sidewalk.
- 17. Issuance of a certificate of solvency or not of the connection rights of the property.
- 18. Issuance of connection rights in case the pipeline is under the jurisdiction of EYDAP.
- 19. Property sewerage check due to frequent blockages.
- 20. Verification of property damage due to failure to the sewerage network.

Our electronic services are constantly upgraded with a bigger emphasis on the immediate and efficient customer service and with the use of the existing digital networks.

A relevant extensive report is on page 35, Chapter 1, of this Report.

#### **EMPHASIS ON SPECIAL CUSTOMERS**

In 2016, the Special Customer Management Division was established for the provision of **targeted customer services**, i.e. to the **Municipalities**, **the State** and the **Large Customers**. The term Large Customers includes those with large consumptions, large number of connections and large diameter connections.

EYDAP through this Division aims to create strong relationships with Special Clients, to raise awareness and to build a productive and efficient cooperation.

# The Company gradually approaches their special needs and requirements, while projecting a new, modern, effective profile.

It was under this perspective that two events were organized, in December 2019 at the **Cultural Center "Hellenic World"** during the **Anniversary Exhibition "The Great Challenge: 90 Years of Marathon Dam"** for the history of the Marathon Dam. One included the representatives of the Municipalities and the other the Large Clients.

The responsibilities of the Division, among others, include the processing of their requests for issues related to water connections, to meter reading, to debt settlement and to their introduction to a subsidized program for debt settlement.

In **2019**, a series of procedures were completed to facilitate Special Clients i.e. for the grouping of multiple accounts, the identification and settlement of doubted water connections, the alternative ways for debt settlement, e-reports for the monitoring of problematic connections – meters with continuous zero readings or continuous imputed consumption. Evaluation studies were prepared for Networks that are going to be incorporated, while at the same time the incorporation of the Salamis and Megara Networks is in progress.

In **2019**, € 49,874,919.66 was collected from the Municipality Service, € 14,860,416.76 from the Public Sector Service, € 23,419,380.02 from the Large Customer Service and € 2,124,289.86 from the WWTPM.



#### How do we evaluate our approach?

As far as the General Tariff is concerned 5% are charged with the first rate and 1% with the second rate. Iit is worth noting that the average annual price per cubic meter of water consumption with General Tariff is € 0.78, while the corresponding average annual price of water consumption and use of sewers per cubic meter is € 1.21.

For the evaluation of customer satisfaction we use the index "satisfaction of requests for reductions of charges" which has as denominator the number of requests submitted annually for reductions of charges and as numerator the number of respective requests satisfied by the Company.

	2018	2019
Number of requests for charges reductions	6,851	6,694
Number of requests met	6,653	6,559
Value of the bills to be examined	10,477,180.49	10,573,915.91
Discount value	5,828,716.63	5,874,058.28

<sup>\*</sup> In 2018 97% of requests submitted for charges reductions (from not obvious leaks, water theft, etc.) were satisfied, whereas in 2019 98%.

In 2019, there is a decrease in the number of requests examined by 157 compared to the previous year. The invoices to be examined were of a total value of  $\[ \]$  10,573,915.91, on which a discount of  $\[ \]$  5,874,058.28 was granted.

**122,252**water supply connections only

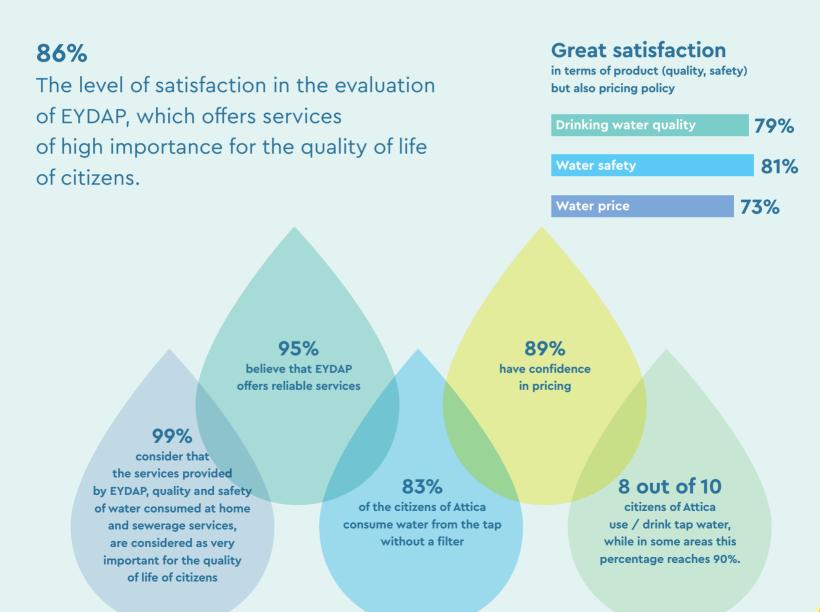
**44,031** sewerage service only

2,044,840 water supply and sewerage service connections

#### Corporate image and customer satisfaction research

In May 2019, EYDAP conducted a customer satisfaction survey, which acknowledged the almost universal public trust in EYDAP and the corresponding satisfaction with the services and its pricing policy. The quality, safety and price of the services provided by EYDAP satisfy the vast majority of consumers.

The survey was conducted by a market research company. 606 telephone interviews were conducted, based on stratified random sampling.





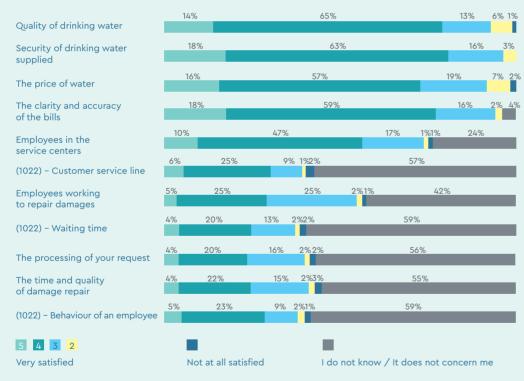


#### **CUSTOMER SERVICE**

Very positive picture in the field of individual evaluation of services provided and in customer service procedures.

## Very positive image from those who had the appropriate experience for the evaluation of:

- The staff in the Service Centers,
- The Hotline
- The waiting time required to get served
- The personnel working to repair damages
- The processing of requests
- The time and quality of damage repair
- The overall behaviour of staff



However, as the survey showed, there was room for improvement in the relationship of citizens with the people of EYDAP and in the more bureaucratic services (processing of requests, damages).

EYDAP Customer Service Centers is a strong communication channel, mainly for older people, as only the 24% uses e-banking.

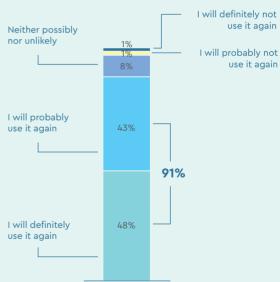




When it comes to digital services, the key finding is that while they seem to be steadily becoming more popular over time, preferred by younger consumers, public awareness of them has remained relatively limited.

# **91%** said they would probably use them again

## POSSIBILITY TO REUSE EYDAP'S ELECTRONIC SERVICES



EYDAP, taking into account the findings of the research, proceeds with a continuous upgrade of the electronic services while informing the public about the electronic services it offers.



## 3.6 Fight Against Corruption



GRI 103-2

#### How do we manage it?

EYDAP, through the Establishment of an Anti-Corruption and Bribery Policy in harmonization with the European Policy and the Greek Action Plan for the Fight against Corruption, is committed to conduct the full range of its activities with transparency, ethics and integrity, ensuring the high quality of services it provides, and implements a zero-tolerance policy against Corruption and Bribery.

Not fighting corruption is an obstacle to development and reform with a negative impact on the allocation of resources for environmental protection and the achievement of social goals.

Goal 16 "PEACE, JUSTICE AND STRONG INSTITUTIONS" for Sustainable Development set by the UN for 2030, to which our Company is committed, refers to reducing corruption, increasing transparency, reducing illegal cash flow, improving access to information.

### At EYDAP we are firmly committed to conducting our business activities with integrity, honesty, transparency and respect for society and the environment.

Meeting the needs of all our stakeholders (customers, suppliers, agencies, shareholders, investors, employees, society) we enhance the Company's credibility and reputation, clarity and efficiency, not only fully complying with the legal and regulatory framework, but also implementing a series of preventive actions against corruption.

The main risks, related to issues of Corruption and Bribery, in relation to all the activities of EYDAP, are:

- 1. Employee Bribery.
- 2. Embezzlement of money by Employees working in the Company's Counters.
- **3.** Participation in fraud.
- **4.** Infringement of the duty of an official

with the intent to harm the citizen or • conflict of interest affecting different the state or to offer himself or someone else illegal benefit.

- goods, the provision of services and the execution of works involve the following risks in corrupt practices:
- wording of the specifications in a way that favors certain economic operators,

- stages of competitive processes.
- recourse to direct contracts in order 5. In particular, contracts for the supply of to avoid the obligations of the tender procedure,
  - cooperation with unreliable or insolvent economic operators.
  - 6. Discrimination in matters of recruitment.
  - 7. Sponsorships-Donations.

To combat corruption and address the negative consequences of the cost of corruption,

**FYDAP** takes the appropriate due diligence measures, carries out financial audits, takes measures for risk management, conducts security and compliance audits, faithfully implements the relevant legislative and regulatory framework and follows the necessary procedures and specific actions and policies, as described below.

• Establishment of the "Policy against Corruption and Bribery", which was drafted in accordance with the best international business practices but also the special needs and corporate culture of EYDAP. The Company is committed to operating with professionalism, legality and integrity in all its professional transactions, as well as the introduction of anti-corruption measures, in order to maintain high levels of ethics and

protect its reputation. Planning anti-corruption measures reduces the risk of fraud and enhances the company's market value, as it is a practical proof to the stakeholders of the commitment to good Corporate Governance and Corporate Social Responsibility. The adoption of an anti-corruption process framework enhances the Company's reputation, the clarity and efficiency of its business activities and also mobilizes and inspires the employees themselves, allowing them to operate in a context in which efficiency will be combined with a respect for rules. This Policy applies to all members of the company, regardless of the level at which they work and the title/rank they hold, including senior management, senior executives, directors, members of Committees and Boards of Directors. employees (permanent, fixed-term or temporary), consultants, contractors, students and trainees. Failure to comply with this Policy, whether intentionally or unintentionally, may lead to disciplinary action which may result in their dismissal for serious misconduct as well as the criminal prosecution of the person involved, under existing Greek law. Personnel are encouraged to report any concerns or suspicions as soon as they become aware of them. No employee will be affected because he raised serious concerns about bribery and corruption. The reported incidents are investigated by the Company in an appropriate manner and if they are confirmed, corrective measures are taken.

- · Enhance transparency by applying the relevant procedures arising from the current institutional framework, in particular from stock exchange legislation, such as disclosure of regulated information, valid and timely information to investors, disclosure of transactions by persons exercising managerial responsibilities to the Company, procedure to preventabuse of privileged information and publi-cation of important corporate information on the Company's website, disclosure of financial information statements to the Hellenic Capital Market Commission web portal, submission and publication of asset declarations by liable persons.
- In connection with the implementation of an information policy, **corporate printed material** relative to Company's activities, strategy, targets and performance is distributed
- Drafting an Internal Rule of Corporate Governance and Operation, in line with current legislation that facilitates the formulation of corporate governance policy and practices. The Regulation is structured to meet the needs of the Company, following high standards of corporate governance and transparency. It clearly shows the elements of corporate governance, the internal control system, and the assessment and management of operational risks.



• Internal Staff Regulations, which establishes rights and obligations of its staff, especially when dealing with citizens. Among other things, it is expressly forbidden for the Company's employees to demand or receive from citizens, directly or indirectly, any gifts or fees or other benefits or related promises to themselves or to third parties.

For cases of **disciplinary misconduct**, related to the violation of the Personnel Regulations (PD 597/1985) and the Internal Personnel Regulations, the Company's Disciplinary Board is addressed.

• In the area of **public contracts**, the Procurement Division and its responsible Services fully implement the procedures of the new Law 4412/2016 "on public contracts of works, supplies and services", under which contracting entities are required to deal with economic operators equally, non-discriminatively, act transparently, respecting the principles of proportionality, protection of public interest, protection of the rights of individuals, freedom of competition, environmental protection and sustainable development. Provisions are made to meet the obligation to effectively

prevent, identify and remedy a conflict of interest, the obligation to disclose public contracts and the procedures and elements prior to their conclusion. In addition contracting is being set up digitally to provide additional guarantees regarding the prevention and detection of corruption practices as they help to increase transparency and facilitate control mechanisms.

- Updating the recording and evaluation of the risks faced by each organizational structure of the Company, in order to properly manage and deal with them effectively, in order to prevent, among other things, incidents of corruption and bribery.
- Decision to establish an **independent Risk Management Unit** to support the risk management strategy, coordinate management at the corporate level and prepare reports to the Board and shareholders of the Company for risk issues. Its organizational structure, operating procedures, responsibilities and cooperation relationships will be reflected in its Rules of Procedure.
- Creation of a "Whistle-blowing" System. The Company plans the drafting of an internal policy of raising concerns that will define the standards and procedures of report management, thus contributing to the cultivation of a climate of open communication, transparency, accountability and responsibility. The purpose of the Management Policy of signed or anonymous reports and complaints is to create the framework for the timely detection of irregularities, omissions or criminal acts that threaten the proper operation and organization of the Company.
- Carrying out regular audits of the Company by the certified auditors.
- Update Regulations and Policies at regular intervals in order to continuously comply with current legislation and international best practices.

Internal Audit is strengthening the company's position and credibility.

In this context our goals for 2019 were:

## Presentation of Regulatory Compliance

A presentation was made to the members of the Management, the Board of Directors, the senior managers and the internal auditors for Regulatory Compliance issues, by the competent Head of the Hellenic Corporation of Assets and Property.

• Establishment of a Register of Audit Reports from 1999 until today, which is kept in paper and digital form.

#### Anti-corruption organization

Participation of internal auditors in the 12th Annual Conference of Transparency International Greece organized by EVEA, "From darkness to light, the need - the regulation - the practical application".

#### Development and cultivation of a "corporate regulatory culture" -**Presentation of Regulatory Compliance**

Information and presentation was made to the members of the Board of Directors, the Management and senior Executives, of Regulatory Compliance issues, by the competent Regulatory Compliance Officer of the Hellenic Corporation of Assets and Property.

#### Certification in Regulatory Compliance:

The Regulatory Compliance of the Company is its philosophy and commitment, as a model of corporate culture and a measure to strengthen its corporate image. In this context, as well as the effective management and response to risks, executives of the Legal Services Department received certification in "Regulatory Compliance" from the Training and Lifelong Learning Center of the National and Kapodistrian University of Athens.

#### Goals for 2020



- Ethics and Professional Behavior for the strengthening of moral behaviour and the promotion of values that the Company considers significant in all its business activities.
- Drafting a Sponsorship Policy to ensure the alignment of corporate goals with the sponsorship activity, aiming at the same time at the protection and strengthening of the Corporate image and reputation.

### certification with international CIA certification

In 2019, the certification of auditors in the first and second part of the CIA was successfully completed and the certification process for the third part is underway, something that will add value to the Company. The goal was for even more auditors to obtain certification.

#### Use of new technologies to strengthen internal control

The upgrade and standardization of control procedures with the use of specialized software, the use of big data analytics tools and the optimum filing

 Completion of internal auditor of corporate and regulatory documents through the existing document management application with the necessary training of auditors is an ongoing procedure.

#### Organization of an information day on Internal Audit issues

In the context of creative cooperation of the Internal Audit Division with the other Corporate Divisions, an Informative Forum for the staff will be organized. Speakers will be internal audit executives and visiting personalities from public and private entities, under the auspices of the Institute of Internal Auditors.



GRI 103-3, GRI 205-1, GRI 205-2, GRI 205-3

#### How do we evaluate our approach?

- Recording of procedures in all activities of the company in a unified and structured way. This process is a strategic tool of the Senior Management for the continuous improvement of corporate processes and the strengthening of accountability and transparency.
- Establishment of a Risk Register. In 2019, the risk register based on a specific methodology (risk Assessment) was updated, with risk identification, rating and mapping of risks throughout the Company and defining how to limit them.
- Planning and implementation of monitoring of agreed changes (follow up) by the competent Divisions, in the context of checking of corrective actions recorded in a special register, in order to optimize the procedures and promote the principles of good corporate governance.

Although it is the responsibility of management to design and implement systems of procedures and safeguards in order to prevent, detect and reduce fraud and corruption, the Internal Audit evaluates – through the audits carried out – the effectiveness of these systems.



#### Gold Award / Certification awarded to the Internal Audit Division

at the event RESPONSIBLE MANAGEMENT EXCELLENCE of EBEN GR (representative of the European concept of business ethics), due to the satisfaction of principles of integrity, objectivity, responsibility and development of actions that promote social prosperity, respect for human value and environmental protection.

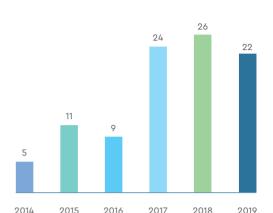
## COMMUNICATION AND INFORMATION ABOUT CORPORATE ANTI-CORRUPTION POLICIES

In an issue of the **PERISKOPIO newsletter**, issued by the Internal Audit Department on a quarterly basis, sent electronically to all employees and posted **electronically** on the corporate intranet, they were informed about the Policy against corruption and bribery and related issues.

It is also possible for employees to send in a separate e-mail, of limited access to internal control auditors, any questions, queries, comments and concerns they wish

Informing our partners and in general all interested parties about the relevant anticorruption policy, is possible through our corporate website www.eydap.gr, in which it is also posted..

## INTEGRATED INTERNAL AUDIT TABLE INSPECTIONS COMPLETED BY YEAR



#### **CORRUPTION CASES 2019** A. Total number and nature of corruption incidents 1. The use was observed by one (1) employee, of a degree whose authenticity was not certified. The disciplinary procedure was completed within 2019 and a penalty was imposed, according to the Personnel Regulations of EYDAP SA. (PD 597/1985). 2. One (1) incident of employees of the Regional Customer B. Total number of corruption cases related to Service Center reforming a customer's water bill over and disciplinary sanctions against Company employees, beyond legal procedures, was detected. The procedure was during the reporting period completed in the second degree within 2019 and a penalty was imposed, in accordance with the Personnel Regulations of EYDAP SA. (PD 597/1985). C. Total number of corruption cases related to termination of partner contracts or non-renewal 0 of contracts due to corruption, during the reporting period D. Legal cases related to corruption cases filed against the Company or its employees during 0 the reporting period







# 4.1 Protection of Marine Environment (Effluent Management)



GRI 103-1

#### Why is it material?

EYDAP, by providing high quality water supply and sewerage services, has the protection of the environment at the heart of its business model

contributing to the achievement of the Sustainable Development Goals 12 "RESPONSIBLE CONSUMPTION AND PRODUCTION" and 14 "LIFE IN THE WATER" as these were defined by the United Nations.

The maintenance of the good quality of the marine ecosystem of the Saronic Gulf, to the extent that is associated with the proper functioning of the Wastewater Treatment Plants and the achievement of the qualitative targets, safeguards the reputation of the Company from adverse effects, while in parallel protects it from financial and operational risks, such as imposition of fines.

The risk of negative reputation may affect the overall image of the Company and in particular the trust of stakeholders in adopted environmental technologies, as well as in the design of new projects such as the Wastewater Treatment Plants, in areas of Eastern Attica.

The preservation of the good ecological state of the Saronic Gulf marine ecosystem does not depend solely on the competent operation of the Psyttalia WWTP and of the sewerage network. A long series of factors that unfortunately lie beyond EYDAP's responsibility, such as illegal waste disposal, marine accidents, rainwater runoffs, etc., influence the final quality of the water recipients.

GRI 103-2

#### How do we manage it?

The three Wastewater Treatment Plants (WWTPs) of EYDAP, at Psyttalia, Metamorphosis and Thriassio, along with the central collectors, the extensive sewer networks and the serving pumping stations are key environmental infrastructures for the collection and treatment of urban wastewater aiming at the protection of both citizens' health and of water recipients.

The proper functioning, the monitoring, the continuous maintenance with high-technology means and the development of the sewerage network contribute to the mitigation of the indirect discharges to marine recipients.

Objectives are satisfied through the continuous monitoring of the quality of the WWTPs outflow and the overall monitoring of the recipient in collaboration with **reputable scientific bodies**.

# EYDAP collects and treats urban wastewater aiming at the mitigation of environmental impact.

The Company satisfies the required quality standards, invests in the upgrade of the available wastewater treatment technologies and proceeds to the adaption of circular economy. In this context, EYDAP develops technologies for the reuse of treated effluent for irrigation and suburban use, manages the solid waste and uses the dried sludge as fuel or soil improver.



GRI 103-3, GRI 306-5, GRI 305-6, GRI 303-2 (2018)

#### How do we evaluate our approach?

## SUSTAINABLE URBAN WASTEWATER MANAGEMENT

The operation of the Wastewater Treatment Plants minimizes the impact of treated outflow on marine recipients. The WWTPs' treated outflow ends up in the sea free of its pollutant load by approximately 95%.

## IMPROVEMENT OF THE STATUS OF WATER RECIPIENTS

The proper functioning of the Psyttalia WWTP, as evidenced by the improvement of the ecological state of the Saronic Gulf, strengthens the confidence of stakeholders and facilitates the adoption of similar technologies and the development of new Wastewater Treatment Plants.

The Psyttalia WWTP, since its initial phase of operation in 1994, marked the improvement of the marine ecosystem of the Saronic Gulfthat in previous years had been seriously downgraded due to the uncontrolled effluent discharge.

The upgrade of coastal recreational waters is also proved by the merited blue flags almost all along the Saronic coastline, a symbol of environmental quality, awarded strictly to organized coasts managed by coastal municipalities, mainly awarded on the quality of sea water.

EYDAP manages and operates the largest Wastewater Treatment Plants in Greece.

Its proven expertise in urban
wastewater management is an important
factor for the expansion of its activities
in Eastern Attica and for the provision
of its know-how to smaller
municipalities and island regions
through its subsidiary,
EYDAP Nison Development S.A.

## COLLABORATIONS WITH SCIENTIFIC BODIES

EYDAP has entrusted with the Hellenic Centre for Marine Research, even before the operation of Psyttalia WWTP, the systematic monitoring of the Saronic and Elefsina Gulfs' ecosystem, already identified as sensitive recipients. Monitoring includes all necessary indicators and parameters for the evaluation of the environmental and ecological status of the marine ecosystem, namely: physical parameters such as temperature, salinity, density,

dissolved oxygen, fluorescence clarity / cloudiness, nutrients, chlorophyll. The ecological evaluation of the Saronic Gulf includes the study of bio enosis, phytoplankton, zoo benthic biocoenoses and sediments for the determination of organic carbon, total nitrogen, total carbon and heavy metals.

According to the most recent data from the ongoing monitoring program of the HCMR, the maintenance of the good status of the Saronic Gulf ecosystem is confirmed.

# DISCLOSURE OF THE WWTPS' GOOD OPERATION RESULTS TO THE PUBLIC

The proper functioning of the WWTPs, with regards to the impact on the recipients, is related to the quality of their outflows. The treated effluent from the Psyttalia and Thriassio WWTPs end up to the Saronic and Elefsina Gulfs while those from Metamorphosis WWTP end up to the Saronic Gulf, through its main recipient, the Kifissos River. The WWTPs' output sampling results on quality analysis are published on the internet and are accessible to the public through the National Database for Monitoring the Operation of the Wastewater Treatment Plants of YPEKA (http://astikalimata.ypeka.gr/).

The achievement of quality terms of treated outflows, per monitored parameter for each of EYDAP WWTPs, is depicted on the following table:

**ACHIEVEMENT OF THE TREATED OUTFLOWS QUALITY TERMS 2019** 

	BOD5 Biochemical Oxygen Demand (of the first 5 days)	COD Chemical Oxygen Demand	TSS Total Suspended Solids	T-N Total Nitrogen
Psyttalia WWTP	✓	✓	✓	✓
Metamorfosi WWTP	✓	✓	✓	<b>√</b>
Thriassio WWTP	✓	✓	<b>√</b>	✓

EYDAP consolidates the effective operation of the Wastewater Treatment Plants in its area of competence, spearheaded by the Psyttalia WWTP, monitoring the marine environment and contacting studies on the impact of treated outflows in the bathing waters of Attica close to the Plants. This is an ongoing procedure and it is in this context that EYDAP applies an extended program for the modernization of its installations leading to quality results much lower than those determined by the Approved Environmental Terms, to the mitigation of consumed energy and, in case of Psyttalia WWTP, to energy independence. At the same time, the Company submits proposals to Public Authorities for the modernization of current legislative framework.

Today, the beaches along the Saronic Gulf around Psyttalia present qualitative features that comply with the high prerequisites for bathing waters - as proved by the environmental monitoring, with frequent tests realized by competent State Entities such as the Hellenic Centre for Marine Research, the Special Secretariat for Natural Environment and Waters of the Ministry of Environment and Energy, the Municipality of Attica Region and the "Blue Flags" Program.

In 2019, as in previous years, compliance of the WWTPs' outflow with the above quality limits contributes significantly to the quality of the Saronic Gulf.



## 4.2 Environmental Compliance



GRI 103-1

#### Why is it material?

# Environmental compliance consists for EYDAP an essential tool for the achievement of Sustainable Development Policies.

Compliance with Environmental Legislation is in close relation to environmental policies and to Sustainable development strategies, as incorporated in National and European law. In this way important environmental goals related to Sustainable Development and compliance with Law is achieved, and specifically the Sustainable Development Goal 16 "PEACE, JUSTICE AND STRONG INSTITUTIONS", as defined by the United Nations.

EYDAP recognizes the particular importance of environmental compliance and its exemplary role as a Public Utility Company in the Field of Environmental Law. Non-environmental compliance bears the risk of substantial damage to corporate reputation.

There is also the risk for the Company for significant financial consequences in the form of heavy fines in case of failure to comply with environmental terms and conditions, as a result of the very strict National and European Legislation.

#### WATER AND CLIMATE CHANGE

Climate change is expected to significantly affect water lifecycle. As temperature rises, atmosphere will hold larger quantities of water leading to intense weather conditions, floods and natural disasters. It is also expected that natural storage of water in the form of snow or ice in the catchment basins will mitigate, as average temperature is to rise. Given the impact on reservoirs and in general on water sources, infrastructures and cities served, pressure created will have a direct impact on water supply and sewerage services companies such as EYDAP.

GRI 103-2

#### How do we manage it?

The application of prevention and protection principles in EYDAP's works and activities is applied through:

- environmental impact studies
- rational and sustainable water resources management
- development of leakage reduction programs in the water supply network (pressure management, pressure zones, immediate repair of failures in the network, network replacement)
- use of new technologies for the reuse of treated effluent for irrigation and urban use
- effective operation of WWTPs
- collection of urban effluents with continuous on the spot sampling and real-time good operation monitoring
- energy saving

**Prevention and protection principles are "incorporated"** in the technical design of water supply and sewerage works through strict Water Supply and Sewerage Regulations, environmental specifications and Standards which include:

- selection of appropriate materials and machinery
- project design, including backups and
- protective mechanism against environmental accidents (pollution related accidents).

Infrastructure operation and maintenance is of great importance for the achievement of environmental compliance. Organized units, both in the water supply and sewerage sector, are alert to address any problem that may arise in the operation of networks and facilities.

#### ADDRESSING CLIMATE CHANGE - REDUCING CARBON DIOXIDE EMISSIONS

**EYDAP reports on the amount of pollutants released into the atmosphere as result of effluent treatment** (from the Psyttalia, Metamorphosis and Thriassion WWTPs). Reports are submitted in the context of European Pollutant Release and Transfer Register (PRTR). The reported data are submitted annually, by the end of March.

The Psyttalia WWTP of EYDAP has been incorporated in the European Emissions (Allowances) Trading System (Greenhouse Gas) and complies with the relevant provisions set by the relevant Community and National Legislation.

The new project studies include, as required by the law, an impact evaluation on greenhouse gas emissions and climate change. Measures are also being proposed to address those impacts and to protect the new infrastructure from extreme events such as floods, as the average atmosphere temperature rises.



GRI 103-3, GRI 307-1, GRI 305-5

#### How do we evaluate our approach?

EYDAP, in the context of environmental compliance in the field of environmental licensing, complies with the approved environmental conditions for all its facilities (Wastewater Treatment Plants, Water Treatment Plants and External Water Supply System etc.).

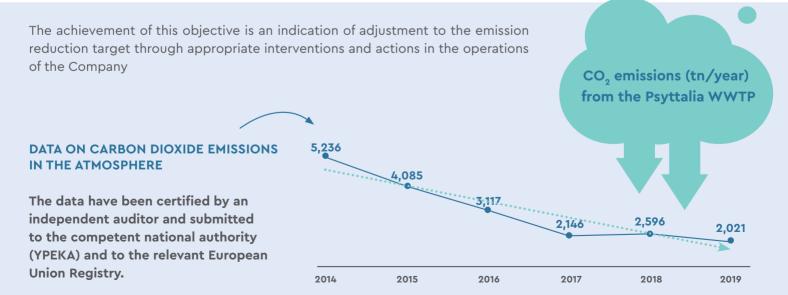
Every **Wastewater Treatment Plant** and every **Water Treatment Plant** along with their supportive projects, operate under the Approved Environmental Terms. The same applies to all the installations of the **External Water Supply System**.

The principal of environmental compliance procedure applies to every new project or modification of existing ones

During the reporting period there was NOT ONE incident of non-compliance with environmental legislation and regulations.

#### **CARBON DIOXIDE EMISSIONS**

EYDAP has reduced its carbon dioxide emissions by more than 60% over the last five years (from 2014 – to 2019) from the operation of the Psyttalia WWTP.



GRI 303-1 (2018), GRI 303-2 (2018), GRI 304-1

## 4.3 Protection of Biodiversity

#### WATER RESOURCES MANAGEMENT AND BIODIVERSITY PROTECTION

Protection of water biodiversity is a key parameter in the sustainable management of water resources. EYDAP, through water cycle management, **protects aquatic ecosystems** in its area of operation.

#### STRICT PROTECTION OF WATER RESOURCES - PROTECTION OF ECOSYSTEMS

Main objective in reservoirs' management is water quantitative adequacy and quality maintenance. Health Provision A5/1983 is the regulating tool that defines the activities permitted in the lakes and the protection zones around them, thereby constituting an important shield of protection for lakes' ecosystems.

As human activities are regulated rigorously, lakes evolve into important wetland biotopes which support protected bird species, fish fauna and unique lakeside vegetation.

#### Reservoirs - important wetland biotopes

Their primary role is to store water of high quality for the capital's water supply, but they serve as important ecosystems:

- Yliki natural lake is a water supply source for the Water Supply System of the Capital and part of the nature protection network Natura 2000.
- Marathon's artificial lake the first reservoir of the Attica water supply system and an important wetland biotopes.
- Mornos Reservoir and Evinos Reservoir are important wetland ecosystems.

#### WATER FOR THE ECOSYSTEM - "ENVIROMENTAL FLOW"

EYDAP, for the safeguarding of the continuity of wetland biotopes, appointed to scientists in collaboration with Higher Educational Institutions such as the National Technical University of Athens, the feasibility study for the maintenance of a minimum flow, called "environmental flow", in river ecosystems downstream of dams. This minimum required flow is in line with the legislation, the environmental conditions and the contemporary international trends in the environmental management of reservoirs.

At the Marathon Dam after the necessary interventions the flow downstream the Marathon Dam has been increased to 25 l/sec. The Marathon Lake is an important wetland biotopes as it is located near the capital with recreational, educational and awareness-raising value.

The river ecosystem downstream the Mornos Dam is in a good state due to the continuous flow of surface water into the riverbed. EYDAP systematically monitors its ecological and chemical status by applying a hydro morphological, physiochemical, biological and chemical evaluation program always in compliance with the requirements of the Water Framework Directive 2000/60/EU and the Water Management Plan GR 04. So far, the results prove the good ecological and chemical status while the ongoing monitoring will confirm the above.

At the **river Evinos**, the newest reservoir, an "environmental flow" of 1 m<sup>3</sup>/sec has been planned. The riverside ecosystems downstream of the dam retain their natural pattern and important biodiversity.



#### PROTECTION OF MARINE ECOSYSTEMS

Water bodies are not addressed as recipients of treated effluent but as **important** aquatic ecosystems whose function, fauna and flora must be protected.

The Wastewater Treatment Plants of EYDAP are important environmental infrastructure projects and safeguard the unique ecosystems of the recipients.

EYDAP provides high quality urban wastewater treatment in the Capital Region (area of its competence).

The operation of the Psyttalia WWTP (with an operation of primary treatment since 1994 and an operation of secondary treatment since 2004) has contributed significantly to **the recovery of marine life** in the Saronic Gulf after decades of untreated sewerage discharge. EYDAP over time, in scientific collaboration with the Hellenic Center for Marine Research, monitors the situation of the Saronic Gulf and the Gulf of Elefsina, which are sensitive recipients.

Studies show a long-term improvement in both physico-chemical parameters and the status of marine ecosystem. In the context of Directive 2000/60 and implementation of River Basin Management Plans, the ecological status of the Saronic, as recipient of the Psyttalia WWTP, has been assessed as 'good'.

The Design of the WWTPs follows the Environmental Impact Assessments, which analyses the current status of the aquatic ecosystems of the recipients.

The selection of the WWTP's processing degree always takes into account the quality of the recipient and the protection of its ecosystems. In case of particularly sensitive recipients, such as the Elefsina Gulf – recipient of the Thriassion WWTP – an even higher level of treatment is applied to ensure its protection.

EYDAP project for a complete sewerage system in Eastern Attica areas will give a definitive solution to a long-standing problem. The integrated wastewater management project for re-use of treated effluents for irrigation and suburban use will undoubtedly have positive effects on the sustainability of water resourcs, the protection of the marine ecosystem and the groundwater aquifer.



# 4.4 Wastewater and Solid Waste Management (Circular Economy)

GRI 103-1











### Why is it material?

EYDAP, as a utility company operating in the field of water services, has as its main activity the production and distribution of drinking water as well as the collection, management and treatment of urban effluents.

In this context, EYDAP's operations regarding solid waste and wastewater management are of particular importance both for the protection of the environment and for the Sustainable Management of the natural resources.

#### Modern technologies treat urban liquid waste as a source of raw materials to be exploited and reused.

Through the responsible management of effluents and solid waste as well as through the implementation of circular economy practices, the Company contributes to the achievement of the Sustainable Development Goals as these have been defined by the United Nations and more specifically the goals 3 "GOOD HEALTH AND WELL-BEING", 7 "AFFORDABLE AND CLEAN ENERGY", 12 "RESPONSIBLE PRODUCTION AND CONSUMPTION", 14 "LIFE BELOW WATER" and 15 "LIFE ON LAND".

All planned projects will terminate the uncontrolled discharge of untreated effluents and will ensure the Sustainability of groundwater resources. Thus, EYDAP further contributes to the achievement of Sustainable Development Goal 14: "LIFE BELOW WATER".



# RISKS OF NON-INTEGRATION OF CIRCULAR ECONOMY PRINCIPLES

Failure of transition to the circular economy model leads to irrational management of precious water resources, to failure of energy saving management, to discharge of potentially useful solid by-products and to inadequate treatment of wastewater in EYDAP facilities.

As the circular economy model is widely adopted, any delay in the implementation of similar practices by EYDAP shall have a negative impact on the Company's image as a Utility company with priority in the protection of environmental and the natural resources.

As rational waste management practices, recycling and reuse, are key elements of environmental legislation, any delay on behalf of the Company in the adoption of such practices may incur institutional and financial risks as the imposition of penalties and fines.

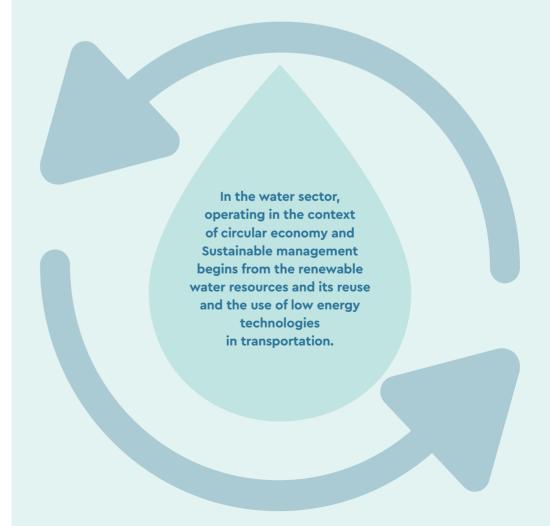
GRI 103-2

#### How do we manage it?

# CIRCULAR ECONOMY AND WATER RESOURCES MANAGEMENT (circular economy and water)

Circular economy is an economic model that aims to **reduce the waste of resources** used in the production processes.

This is achieved through focusing on renewable natural resources, utilizing and reusing by-products from production processes. We focus on utilizing renewable natural resources and energy recovery and energy generation from the waste of production processes.





#### **SLUDGE TREATMENT IN WTPs**

In the Acharnes and Galatsi Water Treatment Plants (WTPs), the sludge from the sedimentation and washing of filters is transferred to existing tanks. Part of this byproduct gives part of the recovered water which is led to the WTP entrance for re-treatment. The remaining quantity is transferred to the Psyttalia WWTP, through EYDAP's sewerage system.

In the context of sustainable water resources management and the application of best available techniques, EYDAP invests in the upgrade of all Water Treatment Plants, by conducting all necessary additional works for the treatment and management of the sludge produced during water treatment.

With environmental sensitivity and responsibility, EYDAP prioritizes the optimum **treatment of the sludge** derived from the water treatment process.

#### Polydendri WTP

In 2019 the construction of the modern sludge management unit was completed and put into operation. The sludge produced during water treatment is further processed. The solid waste is separated from water. The latter enters the WTP for retreatment. The produced solid sludge is collected and transferred to licensed sites. It is estimated that

this procedure will save approximately 4,000,000 m³ of water, in addition to other resources due to reduced use of chemical materials energy, etc.

#### Acharnes WTP

The construction of the **sludge management and reverse washing units** started in **2019**, with an estimated completion time in March 2021.

#### Galatsi WTP

The construction of the **sludge management unit.** The project is in the auction phase.

#### Aspropyrgos WTP

The maintenance and upgrade of the existing sludge processing systems was completed and put into operation in 2019. It is estimated that

this process will save around 1,000,000m<sup>3</sup> of water and resources by reducing the energy consumption of chemical materials etc.

The sludge produced by the treatment of the raw water will be collected by licensed companies and may be used for soil improvement in case of tree plantings and by cement and ceramics industries.

#### CIRCULAR ECONOMY AND WASTEWATER MANAGEMENT

An Integrated sewage management approach for Attica is a strategic objective for EYDAP. (The subject is further discussed in the chapter «Consumer Health and Safety: Sewerage Services»).

EYDAP, in its effort to contribute to the responsible management of recyclable materials and in order to actively contribute to the global effort for the reuse of raw materials and their return into the economic cycle, promotes the collection and recycling of paper and batteries.

Effluent treatment in the WWTPs produces water (treated effluent) free from its pollutant load by approximately 95%. Outflow ends up in the sea without any significant impact on the ecological balance on the marine ecosystem. A part of it is reused in-house. The solid residue of urban wastewater treatment is the sludge, which is being dehydrated, dried and used as a fuel in the cement industry.

The processed outflow from all three WWTPs ends up in the wider marine area of the Saronic Gulf via appropriate disposal ducts. More specifically, the outflow from the Psyttalia WWTP ends up in the southern side of the Psyttalia Island, the outflow from the Thriassio WWTP ends up in the Elefsina Gulf and the outflow from the Metamorphosis WWTP ends in the Saronic Gulf via Kifissos River.

During the wastewater treatment process, solid waste is generated, mainly consisting of wastewater by-products and sludge. This is non-hazardous waste, the responsible disposal and management of which is a priority for EYDAP's stakeholders, i.e. for the local communities in the areas of the WWTPs, given the large annual quantities.

In **WASTEWATER TREATMENT PLANTS** the solid waste produced at the pre-treatment phase (screening, sand and heavy solids), as well as the primary sludge (thin sludge grate) are landfilled.

The drying of the dehydrated sludge, produced in all three WWTPs, takes place at the Psyttalia WWTP.





The whole amount of dried product produced, is utilized thermally by the cement industry as an alternative fuel, applying a technologically modern, environmentally friendly and Sustainable solution.

Biogas produced at the phase of sludge refinement in both Psyttalia and Metamorfosis WWTPs is exploited for energy production.

- in Psyttalia WWTP the total amount produced is used in -house
- in Metamorphosis WWTP 70% of the amount of biogas produced is used

# PAPER AND BATTERY RECYCLING

A recycling system has been organized in the buildings and the facilities of EYDAP.

Used paper is not considered as litter. It is collected by recycling companies. In collaboration with the Green Angels network of companies, the paper recycling program, launched in 2017, is still in progress.

In November 2019, plastic and aluminum recycling bins have been placed in central buildings.

In 2020, in our recycling procedure we will include electrical and electronic equipment (WEEE) via a certified collection system without a fee.

GRI 103-3, GRI 306-2, GRI 302-5

#### How do we evaluate our procedure?

#### SOLID WASTE FROM WASTEWATER TREATMENT

Solid waste from the Wastewater Treatment Plants is shown below:

#### **BIOGAS PRODUCTION**

#### 31,506,800 Nm<sup>3</sup>

The total amount of biogas produced in EYDAP WWTPs and used for energy production in 2019

#### In 2018, the total amount of biogas produced in EYDAP WWTPs was 31,188,675 Nm3

In 2019 the quantity of biogas produced The reduction in 2019 is mainly due to is larger by 1% in comparison to 2018, despite the smaller quantity of sludge produced due to the increased amount of solids' destruction during the digestion process.

#### **DRIED SLUDGE**

#### 40,160 tn

the quantity of dried sludge from **Psyttalia WWTP** in 2019

#### In 2018, the corresponding total quantity was 44,239 tn

the reduced input loads (in BOD terms) in addition to an increase in the biogas production

#### SCREENINGS AND SAND

#### 9.297 tn

total amount of screenings and sand to Landfill in 2019

#### In 2018 the corresponding total amount was 10,698 tn Psyttalia WWTP 26.3 **Metamorphosis WWTP 2.93** Thriassio WWTP 0.017

In 2018 the amount of sand increased due to the evacuation and cleaning process of the digestion tank in the Metamorphosis WWTP

#### **AVERAGE DAILY AMOUNT** OF SCREENINGS PER WWTP **IN 2019**

Screenings and sand (tn/d) (Psyttalia, Metamorphosis and Thriassio)

Psyttalia	Metamophosis	Thriassio	
WWTP	WWTP	WWTP	
24.21	1.14	0.036	



#### **RECLAIMED WATER**

#### Reused in new sewerage projects in East Attica

In 2019, significant progress was made in the maturity of the sewerage projects in East Attica. EYDAP's planning for these important sewerage projects aims at an integrated effluent management scheme in the area, with emphasis on the potential to reuse treated effluents for irrigation purposes and for suburban use.

# Reuse of the water produced as a result of sludge treatment in Water Treatment Plants

Sludge treatment units in the WTPs will permit **the reuse of water produced** from the centrifugation of the sludge, during the water treatment process. This water will be added to the already in-house reused quantity of water from filter washing with its reintroduction in the aqueducts that transfer raw water to the Plants.

# Reuse of recovered water from wastewater treatment in Waste Water Treatment Plants

Part of the **treated outflow** of the Psyttalia and Metamorfosis WWT Plants is used to cover in-house water needs i.e. **irrigation of greenery, washing (industrial water).** 

This quantity is used within the facilities of EYDAP and is not yet available to third parties.

#### **VOLUME OF RECOVERED WATER**

(from treated outflow) reused

**4,789,043 m<sup>3</sup>** Total Volume

13,120 m<sup>3</sup>/day
Daily Reuse
(industrial water) 2019

# In 2018 the corresponding total volume was 5,370,792 m³ and the daily reuse was 14.714 m³

In 2018 the industrial water consumption was increased due to the evacuation and cleaning of the digestion tank in Metamorfosis WWTP



#### REUSE BY DIRECT PUMPING FROM THE NETWORK (SEWER MINING)

EYDAP implements a **recycling strategy in the existing WWTPs** and in parallel develops relevant research programs aiming at the decentralized recycling by using effluent directly from the sewerage network.

Within the context of the European Research Program DESSIN, the unit installed at EYDAP's Environmental Research and Development Dpt (R&D) at Metamorphosis tests a new technique known as "sewer mining", implemented for the first time in Greece and so far used only in Australia.

A "sewer mining unit" receives effluent directly from the sewerage network, processes it on the spot and produces recycled water for reuse.

#### "Sewer mining" can:

- relieve water and sewerage network from the increasing pressure due to population growth and aging of infrastructure
- reduce energy consumption, as there is no transfer of effluents to the central treatment plant and no transport of recycled water to the point of use. It achieves decentralized treatment and reuse in the area where the water is needed.

The social and environmental benefits of sewer mining technology are significant as it achieves:

- Reduction of the treated effluent amounts led to water recipients.
- **Reduction of water demand** from surface and groundwater aquifers and Sustainability of resources.
- Enrichment of groundwater aquifers.
- Cost reduction of effluent transfer.
- Creation and maintenance of urban green areas, very important for the quality of city life, without waste of drinking water for irrigation.
- Provision of recovered water for irrigation use in areas facing water scarcity, such as islands.

DESSIN and EYDAP were awarded during the 6th "Business Awards for the Environment" in the "Products and Services" and "Biodiversity" categories.

With the use of sewer mining technology, EYDAP participates in the funded European research project NEXTGEN for the re-development of Eleonas area, in collaboration with the Municipality of Athens.



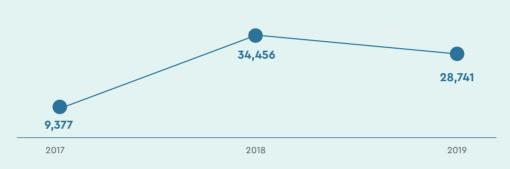
#### PAPER AND BATTERY RECYCLING

#### PAPER RECYCLING

28,741 kg
of paper
were collected
from the
company's offices,
in 2019

207% increase

#### Paper (kg) collected in-house



In addition to paper recycling in EYDAP's facilities, there is **reduction in paper use** due to the development of e-government applications, electronic document management and print reduction.

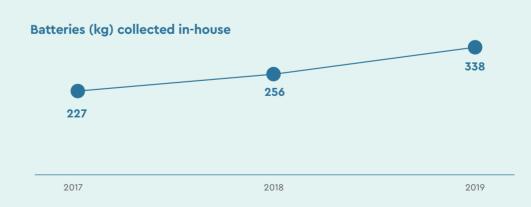
#### **BATTERY RECYCLING**

since 2017

338 kg
of batteries
were collected
in EYDAP's buildings
in 2019.

in accordance to AFIS
and EYDAP data

49% increase
since 2017



Used batteries are collected in special bins in the company's premises and facilities by **AFIS** (Portable Battery Recycling).

# 4.5 Energy Saving



GRI 103-2, GRI 103-3, GRI 302-5

#### ENERGY PRODUCTION FROM RENEWABLE AND ALTERNATIVE SOURCES

EYDAP, aiming at the use of renewable and alternative sources of energy for optimum energy balance, has developed

- energy production from small hydroelectric stations at its aqueducts
- thermal and electricity co-production stations, utilizing the biogas produced by sludge treatment in the wastewater treatment plants
- photovoltaic station at the Acharnes Water Treatment Plant.

#### 20,474,644 KWh

**Electricity production** from small hydro-electric stations installed along external aqueducts in 2019

In 2018 the corresponding value amounted to 21,239,297 KWh

## 2,225,360 KWh

**Electricity production** from a small hydro-electric station is installed at the outflow of Psyttalia, in 2019

In 2018 the corresponding value amounted to 2,325,669 KWh

#### 515,000 KWh

**Electricity production** between 3/10/2019 and 31/12/2019 at the Acharnes **Photovoltaic Station** 

The difference in energy production values between 2018 and 2019 at the hydro-electric stations amounts to 3.6% and is mainly due to instabilities and power failures of DEI network, to extraordinary maintenance works of the E/M equipment and of the aqueducts for the safequarding of its operation.



#### BIOGAS

	2019	2018
Biogas produced in the WWTPs (m³)	31,506,800	31,188,675
Biogas used for thermal energy production at the Psyttalia WWTP (m³)	17,692,564 13,081,500	19,042,695 11,392,100
ENERGY		
Total produced electrical energy from Biogas in the WWTPs (KWh/year)	26,201,220	21,582,180
Thermal Energy recovered from the electricity generation process in the Psyttalia WWTP (KWh/year)	5,266,830	4,427,280
Thermal Energy produced from biogas in the Metamorphosis WWTP (KWh/year)	3,693,055	3,566,111

The biogas amounts of 19,042,695 m<sup>3</sup> and 17,692,564 m<sup>3</sup> for 2018 and 2019 respectively refer to the biogas consumed at the installations used for thermal drying of sludge, at the steam boiler for the production of steam for the sludge thermal hydrolysis unit and at the boilers of sludge digestion unit. The reduced amount of biogas in 2019 is mainly due to the reduced amount of dried sludge in comparison to 2018.

The biogas amounts of 11,392,100 m<sup>3</sup> and of 13,081,500 m<sup>3</sup> for 2018 and 2019 respectively, refer to the biogas consumed at the Electrical and Thermal Co-production Units, including the energy content consumed for the generation of electrical energy, beyond the energy content consumed for the production of thermal energy from the operation of engines. The increased biogas consumption of biogas in 2019 is due to the increased production of biogas and its general management in-house in comparison to that of 2018.

The **biogas** produced at the refinery unit at the Psytalia WWTP is used as fuel:

- in internal combustion engines, for cogeneration of thermal and electric energy
- in the Thermal Drying Unit of dehydrated sludge
- in the boiler room of the Dissolutuion Unit for heating the sludge
- in the steam generating Unit for steam generation (for the sludge thermal hydrolysis unit).



The thermal content of the exhaust gases (thermal energy) of the Thermal and Electricity Cogeneration Units in the Psyttalia WWTP is used for sludge heating in the refinery unit as well as for steam production.

The gases of the thermal drying Unit are treated in Regenerating Thermal Oxidisers, prior to their release into the atmosphere.

Utilization of Biogas produced at the WWTPs and energy from the small hydroelectric power stations and the photovoltaic power station contribute to the National objective for increasing energy production rate from Renewable Energy Sources and to the optimization of corporate energy balance. It also contributes to the achievement of Sustainable Development Goal 7: "Affordable and Clean Energy".

# With the aim of further reducing energy consumption, the following actions are planned regarding corporate buildings:

- In 2019, the tender procedure for the renovation and rehabilitation of the pumping station at Polydendri WTP for raw and treated water, the second most energy-intensive installation at EYDAP after Psyttalia WWTP, was completed. Following the relevant approvals from all competent bodies (Court of Auditors etc.) the signing of the relevant contract is expected within the first months of 2020. With the completion of the projects, it is estimated that significant energy saving will be achieved.
- The tender for the supply and installation of LED type lamps in five (5) corporate buildings was completed, in replacement of the existing old ones with higher energy consumption. On the next stage the program will be expanded to the other privately owned buildings of the Company, as well as outdoor / perimeter lighting on large EYDAP plots (eg WTPs, Marathon etc).
- Aiming at the achievement of significant energy savings and with the contribution of an external energy consultant, EYDAP explores the possibilities of installing photovoltaic power stations with the use of net metering system.
- The installation of a 1,971.20 KW photovoltaic power plant at EYDAP facilities in Acharnes WTP was completed on 3/10/2019 and was put into operation in order to sell the electricity produced.







# Creating Value for our People

# 5.1 Employment



GRI 103-2

#### How do we manage it?

Acknowledging that we operate in a sector of perpetual challenges, environmental and technological, EYDAP continues its efforts to upgrade its operations through a dynamic work environment. Ally and pioneer in this process is its human resources. Each employee, by providing his knowledge and experience, becomes a helper and active formulator of suggestions, ideas and solutions that lead the Company to its steady and Sustainable Development.

Our long-standing commitment to supply the Capital with top quality drinking water, to collect and manage wastewater through processes that ensure public health and environmental protection is made possible by **staffing EYDAP services** with highly skilled people, dedicated to their work.

We encourage the development of personal skills and innovative actions, provide equal opportunities for training in new technologies and structures, and place particular emphasis on employee safety by striving to provide a healthy working environment while respecting human and labour rights. It is our firm belief that the development of the Company is in line with that of our employees and that good cooperation between everybody and respect for the principles of Sustainable Development for the benefit of the society, shareholders and employees is always the aim.

The Company's organizational structure and its procedures for the responsible management of its human capital are governed by its Internal Regulations, always in full compliance with the National and European Regulatory Framework. In this way, the Company contributes to the achievement of the Sustainable Development Goals, as set by the United Nations, and in particular the objectives of 8 "DECENT WORK & ECONOMIC GROWTH" and 16 "PEACE, JUSTICE AND STRONG INSTITUTIONS".

The recruitment process to meet the Company's needs is always carried out on the basis of the relevant legal framework and through ASEP, which ensures the objectivity and transparency of the process. However, the restriction of recruitments due to Law 3833/2010. resulted in the ever decreasing number of employees and the aging of staff. This has led to the potential risk of not being able to meet the Company's everincreasing needs and obligations in the future, as well as the risk of losing the retired workers know-how due to their inadequate replacement by new emplovees.

The increasing needs, the expansion of the Company's scope of activity (new areas are becoming part of the water supply and sewerage network), have made it imperative to strengthen existing staff by hiring permanent workers of various functions and levels of education. In 2018, two (2) competitions were announced for the recruitment of 300 people of different specialties on an indefinite term contract, which is expected to be completed in 2020.

In order to avoid the risk of non-compliance with pressing requirements, especially in times of high demand, the Company has occasionally hired 8-month term workers.

In **2019**, EYDAP implementing previous year's invitations to tender for the meeting of emergency and periodic needs on demand and operations hired

- 220 contract workers, drivers, plumbers, counters, electricians and mechanical engineers of 8 months contracts (SOX 1/2018)
- 54 cleaners with an 18-month contract (SOX 2/2018), remunerated in accordance with the General Provisions of Labour Law and with a full time agreement (excluding cleaners who work 4 hours a day).



GRI 401-1, GRI 102-8, GRI 102-41, GRI 103-3, GRI 401-2, GRI 401-3

#### How do we evaluate our procedures?

For the transformation of the Company into a modern and effective Organization, safeguarding a fair and dynamic work environment, an Optimization Project was initiated in the field of Human Capital.

#### In 2019 was conducted:

- **a.** A study on current management of Human Capital and an overview of payroll policy including the presentation of proposals/solutions for its effective evaluation and reinforcement.
- **b.** A planning of optimization project in short/long term prospect i.e. voluntary retirement program, design of new corporate culture, study for the restructure of the Human Resources Directorate, rational distribution of human capital, adaptation of a common payroll and benefit system, update of Personnel Regulation, Code of Ethics, Code of Corporate Governance, etc.

#### **EMPLOYEES ON AN OPEN-ENDED & FIXED TERM CONTRACT**

	Me	en	Wo	men	To	tal
Attica	2019	2018	2019	2018	2019	2018
Open-ended	1,458	1,476	632	629	2,090	2,105
Fixed-term	159	160	114	103	273	263
Total	1,617	1,636	746	732	2,363	2,368
Boeotia	2019	2018	2019	2018	2019	2018
Open-ended	81	80	4	4	85	84
Fixed-term	7	1	0	0	7	1
Total	88	81	4	4	92	85
Phocis	2019	2018	2019	2018	2019	2018
Open-ended	25	25	6	6	31	31
Fixed-term	2	1	1	1	3	2
Total	27	26	7	7	34	33
Aetoloakarnania	2019	2018	2019	2018	2019	2018
Open-ended	11	11	0	0	11	11
Fixed-term	0	0	0	0	0	0
Total	11	11	0	0	11	11
TOTAL	2019	2018	2019	2018	2019	2018
Open-ended	1,575	1,592	642	639	2,217	2,231
Fixed-term	168	162	115	104	283	266
Total	1,743	1,754	757	743	2,500	2,497

#### Notes:

- Data with effective date as of 31.12.2019.
- The number of fixed-term contracts involve 8-month contracts and contractual cleaners.
- Students and trainee lawyers are not taken into account as they are not considered as employees of the Company.

# RECRUITMENT AND RETIREMENT OF EMPLOYEES

CONTRUCTORS RECRUITMENT*			
Recruitments 2019			
Men	74		
Women	7	74	
TOTAL	1	48	
Recruitments 2019			
Attica	1	34	
Boeotia	10		
Phocis	4		
Aetoloakarnania	0		
TOTAL	148		
RETIREMENTS OF PERMANENT STAFF 2019**			
Breakdown by gende	er		
Men	30		
Women	7		
Total	37		
Breakdown by age	М	W	
<30 years old	0	0	
30 - 50 years old	1	2	
>50 years old	29	5	
TOTAL	30	7	

#### Notes:

- \* Data with effective date as of 31.12.2019, for fixed-term contracts.
- \* Recruitments involve only workers on a fixed-term contract for 8 months and cleaners under a fixed-term contract, too. \recruitment of permanent staff did not take place in 2019.
- \* Students and trainee lawyers are not counted as they are not considered as employees of the company.
- \*\* All retirees were permanent workers in the region of Attica.

#### **CERTIFICATION OF PROCEDURES**

The **procedures** applied and the **services provided to employees**, their insured members and insured pensioners are **ISO 9001: 2015 certified.** The Standard is renewed annually for a period of three years in total, following successful annual Supervision conducted by the Certification Body. In **2019** the 2nd Annual Surveillance was conducted successfully.

In the context of our Sustainable Development, the high quality of services provided to our employees, our most valuable asset, ensures their satisfaction and adds unquestionable value to our Company.





#### **WORKPLACE**

EYDAP, to better meet the needs of citizens' needs and manage its activities more rationally, owns and manages facilities (regional centers, technical sectors, refineries, etc.) scattered all over the Attica basin as well as in the Prefectures of Boeotia, Phocis and Aetoloakarnania.

The Company's **commitment** to respond to demanding environmental challenges, technological developments and the specific nature of its hazardous activities (waste management, etc.) defines the corporate policy to **incorporate into its processes all laws** that ensure **safe working conditions**, **equal and non-discriminatory payroll** for all employees and **full health coverage** for themselves and their insured family members.

### EYDAP fully implements and complies with the provisions of labour law.

One of the main goals of the Company is rational and objective use of its human capital, enabling **personal improvement** and professional development through

training programs, upgraded human resources management schemes, loan programs, etc., benefits which contribute greatly to the sustainable development of the Company.

In order to reduce the risk of knowhow loss, special emphasis is placed on the training of all employees to diffuse and upgrade knowledge. (The topic of Employee Education is discussed in the corresponding chapter in the same section).

The Company is committed to the protection of the environment this is practically made obvious through the ongoing projects in all areas of its activity and in its daily practices. With sensitivity to employees' personal needs and to the effort for environmental footprint reduction, the Company takes under consideration the residence of employees in the choice of place of work, where feasible. Corporate means of transport or rented vehicles (coaches) are available to employees for remote buildings and remote workplaces.

**Peace at workplace**, as contributor to the better performance of employees, is a key concern for the Company. The Company safeguards a healthy, safe and pleasant workplace, compliance with legal frame, constant information for the mitigation of accidents at work, adequate and timely provision of Personal Protection Equipment, improvement of older methods and techniques and adoption of new ones, enhancement of workers' job security.

Workers' rights to equality and safe work are guaranteed through the Collective Labour Agreements and compliance with current legislation for Internal Protection and Prevention Service (ESYPP) and an Employee Health and Safety Committee (EYAE). (The issue of Employee Safety is discussed in the corresponding chapter of the same section).

88.68% of EYDAP employees are covered by the **Collective Labour Agreement.** Only a 11.32%, referring to employees on fixed-term contract, is not covered by the above Collective Agreements but by the General Provisions of Labour Law. All employees, regular staff and contract workers work full time, except for contractor cleaners who work 4 hours a day.

**Staffpromotion** depends to a large extent on the annual evaluation of employees – Appraisal Sheets, as provided for in the Internal Staff Regulation. However, as of 14/2/2012 and in accordance with Law 4048/2012 salary promotions have been suspended.

All employees are required to abide by the **Code of Conduct** that determines the relationship between them, with the Company, with external partners and customers and reflects the Company's policy (based on Internal Personnel Regulation and the Corporate Governance Code, revised according to Company's needs and changes).

The aim of the Company is to strengthen corporate identity and culture through the highlighting of major water and sewage projects, the continuous up-dating of employees' know-how and the encouraging of participation in in-house and outside the Company training seminars and conferences.

For the employees who are about to retire, the Company's target is the establishment of seminars and supportive programs that will ease the transition period. These seminars will focus on

- the acquisition of new skills, to be used after the end of active working life
- on psychological support, acting proactively, ensuring the mental health of impending retirees, etc.

#### **EMPLOYEES EDUCATIONAL LEVEL**

The Company's response to particular environmental challenges, to continuous technological development and riskiness of some of our activities (waste water management, etc.) requires highly educated and specialized staff. A large number of EYDAP's employees have university education and hold a second degree or postgraduate diploma and / or a doctorate.

660
employees
are graduates
of Higher Education
Schools and Technical
Education Schools

434 university graduates\*

226
technical schools
graduates\*\*





\*270 employees hold one degree, 5 employees hold two degrees, 135 employees hold a degree or more and a master's degree or more, 13 employees hold a degree, a master's degree and a doctorate, 19 employees hold a degree or more and a doctorate without a master's degree

\*\*194 employees hold one degree, 6 employees hold two degrees, 26 employees hold a degree and an MSc or more.



166

#### PERMANENT EMPLOYEES BENEFITS

The Company, in the context of peace and stability at workplace, in addition to principal pay, insurance, statutory benefits and leaves, has established the following benefits for all its permanent employees, in all its areas of operation:

- Health Service, which provides primary healthcare to employees and their insured family members and manages their medical and pharmaceutical coverage
- Private insurance contract for employees and their children
- · Compensation from an insurance company in case of partial or total disability to work caused by an accident at workplace, or early retirement with a disability rate
- Nine-month full parental leave, instead of part-time parental leave, to either the mother or the father
- Leave for various reasons (study leave, child illness, blood donation, etc.)
- Parental leave, with half pay, for child care up to two (2) years of age
- Pension insurance for doctors (upon request)
- Pension insurance for engineers and lawyers (upon request)
- One-off pension compensation to permanent employees
- Ownership of shares
- Expense provision for learning a foreign language
- Expense provision for children summer camps
- Expense provision for undergraduate or postgraduate studies
- Provision of loans to cover employees' expenditure on children's school and university student expenses

#### PARENTAL LEAVE

In 2019, in compliance with Law 4342/23-12-2015, 8 employees (5 Men and 3 Women) were given a 9-month parental leave instead of the reduced working hours provided by the law.

100% of the employees provided with a parental leave returned to work after its expiry in 2019.

4 days off are granted to parents with children between 5-18 years of age in order to be informed on their progress at school.

#### On EYDAP's initiative

- employees are provided with an 8-days' leave/year in case of a child's illness, up to 16 years of age. The provision of law is for five (5) days and refers to children up to 12 years of age.
- working mothers, after using up maternity leave are provided with the opportunity to obtain parental leave with half pay until child turns two (2) years old.

#### THE RIGHT TO SYNDICALISM

The constitutional right of being a member of a trade union is exercised by the employees of EYDAP through the EYDAP Employees' Union, which was founded in 1979. It is a Secondary Trade Union Organization and represents the Company's employees.

The aim of the Union is to study, protect and promote the financial, professional, moral, insurance and social interests of its members, to protect the environment, to implement the principle of gender equality and to ensure corporate responsibility.

The **objective** is to claim the improvement of the employee working conditions through dialogue and cooperation with EYDAP's higher management, always within the framework of corporate social responsibility rules.

In order to achieve its objectives, the Union negotiates with each competent body or person, so as to resolve the problems of its members and act for the establishment of the Collective Labor Agreements. Furthermore, the Union actively participates in the meetings of the Administrative and Disciplinary Boards and other entities. Finally, the Union has a presence in the Board of Directors of EYDAP with 2 members, who have the right to vote.

#### SUPPORT TO YOUNG PEOPLE

EYDAP through its effort to support young people accepted as interns 208 students (undergraduate or postgraduate) in July and August 2019. This initiative aims to familiarize young people with working environment and help them gain experience in the workplace.

In 2019, 84 Technological Education students either started or completed their training with the Company, obtaining substantial knowledge and education on the subject of their study. This program is applied in the context of compulsory internship for Higher Technological Institute students.

In **2019 26 students** mainly from **Technical Universities** worked, under the **NSRF** program, in their field of study for a two-month period at the company.

As evaluation criterion we could consider the big number annual applications from Universities students of different specialties.

This success is a result of the good cooperation between the Educational Institutions and the Company's executives, the substantial and high level of information, education and training offered to the students and, of course, to the trainees. The presence of future young scientists in EYDAP through NSRF programs, for internship or research for postgraduate studies, is mutually beneficial.

Our Company is always open to new and innovative ideas.

In **2019**, EYDAP established a reward program the employees' children, following their successful admission to Higher Education Schools.

This initiative aims at the ethical recognition of excellence, as a result of systematic hard work, hoping that this will be an incentive for the development of students in their academic studies and in their professional field.



These programs have been implemented for many years and students preference continues to be high.





# 5.2 Workers' Health and Safety









GRI 103-1

#### Why is it material?

EYDAP, acknowledging its corporate social responsibility and recognizing that key to sustainable development is the protection of the safety and health of its employees, is committed to:

- the constant improvement of working conditions and environment
- the continuous strengthening of a healthy and safety culture, taking into account technological developments and the full implementation of national and EU legition.

Aiming at the long-term Sustainability of EYDAP's business operations, and always taking into account the transformative impact of new technology on workers' safety, the Company protects the mental and physical health of its employees by providing a safe and decent work environment, always considering the special conditions of each activity.

The **risks faced** are related to the **particularities of each workplace** (street crews, construction sites, refineries, etc.), the use of machinery and tools, ergonomics of workplaces, states of emergency (extreme weather conditions, etc.). Good management of health and safety in the workplace is a key precondition ensuring the health of the employees, the productivity, high quality services, the reputation of the company and the impact of the company's activities given its social mission.

EYDAP is **continuously investing** to prevent and deal with the short and long term impacts related to safety in the workplace. The systems applied include risk identification, frequency and impact evaluation, response planning, and **continuous training and updating of workers.** 

Our main goal is to ensure a safe and pleasant working environment, the physical and mental health of our employees and the upgrade of corporate image, thus contributing to the achievement of Sustainable Development Goals 3 "GOOD HEALTH & WELL-BEING", 8 "DECENT WORK & ECONOMIC DEVELOPMENT", 9 "INDUSTRIAL, INNOVATION & INFASTRUCTURES" and 16 "PEACE, JUSTICE & STRONG INSTITUTIONS".

# How do we manage & how do we evaluate our approach?

EYDAP recognizes that Occupational Safety and Health and occupational risk prevention are no longer just a legal and ethical obligation but also a business necessity.

In 2019, EYDAP updated its 2017 Statement of Health & Safety Policy, posted on the Company's website (www.eydap.gr) and in all workplaces, through which the Company is committed to:

**Comply** with legislation, standards and internal instructions.

**Reinforce** preventive measures by evaluating occupational risks and enhancing safe work practices.

**Communicate** openly and transparently with all stakeholders, employees and their representatives on occupational health & safety issues.

**Builds** a health and safety culture through training.

**Review** all of the above processes to Technician are held quarterly to resolve ensure that rules are respected and that issues that arise and to plan further objectives are achieved. actions.

For the implementation of the above and in accordance with Law 3850/2010, EYDAP has set up the Internal Protection and Prevention Service (ESYPP), acting as an advisor to Higher Management. ESYPP is staffed with 8 security technicians, 3 occupational physicians (IE), 1 nurse, 1 public health supervisor and 2 employees as administrative staff t

In compliance with the same law, the "Health and Safety Committee" has been set up, composed of elected workers' representatives. ESC is an advisory body with the responsibility to study the working conditions, to monitor compliance measures regarding employees' health and safety and to identify potential risk. In case of a serious accident, the Committee is to propose measures to prevent repetition and in case of immediate and serious danger to call on Higher Management to take all necessary measures, even to interrupt the operation of machinery or installation or production process. In this context, ESC representatives visit all the Company's workplaces.

Trilateral meetings between the Higher Management, the representatives of the ESC and ESYP in the presence of the Occupational Physician and the Security Technician are held quarterly to resolve issues that arise and to plan further actions.



Main 2020 target for employee health and safety remains the elimination of incidents, as reflected in the Health and Safety Policy Statement, along with the strengthening of the health and safety culture.

The Company's Health and Safety Policy applies to all EYDAP employees irrespectively of their type of contract (indefinite time, part-time cleaning contract workers, 8-month contract workers, 6-month and 2-month interns, trainee lawyers, EPIS students). Therefore, the data described in this report relate to the categories of employees referred to in this paragraph.

The obligations of ESYPP do not include control of compliance with health and safety rules among any contractor staff working in areas of the Company's responsibility. According to law, contractors are obliged to observe safety rules with their Safety Technician and Occupational Physician.

#### **WORK SAFETY SYSTEMS**

- Inspection of work premises and procedures and recording of findings.
- Preparation of Written Occupational Risk Assessments (WORA) for any task performed.
- Harmful Factor Measurements (e.g. Hazardous Drainage Gases) and Physical Factors (lighting, sound)
- Specifications for Personal Protective Equipment and Safety MOP.
- **Specialized marking** in workplaces, based on previous study, for compulsory or prohibited actions.
- Investigation of accidents at work and near misses.
- Employee health and safety training programs in the workplace or at EYDAP Training Center in collaboration with the Department of Education & Human Resources Development.
- Compilation of safe work instructions (general and specific) and upload on EYDAP's intranet, "Thalassa".
- **Preparation of annual activity report** at the beginning of each year. A review of previous year's actions that outlines Safety Techniques per corporate activity, suggesting procedures' improvement.
- Issuance of suitability certificates for any employee change of service :
- Change of job or of working hours
- Posting or transfer of employee
- Return to workplace

Certificates are drawn up by EYDAP's Occupational Physicians, who maintain the Individual Health Sheets of all employees. In case of an employee's health problem, the Occupational Physicians, after taking into account the medical diagnosis of the attending physician and the medical examinations provided by the employee, proceed to the attestation of suitability for employee's transfer other workplace.

• **Vaccination program** for employees in highly sensitive activities in collaboration with nursing staff (employees in wastewater quality control laboratories, Sewage System Workers, workers in Wastewater Treatment Plants)

#### **INSPECTION SCHEDULE**

For the implementation of the annual inspection programs we fully comply with legislation taking into account our Corporate Particularities

Scheduling the frequency of annual inspections based on:

- Nature of the work (administrative, technical, indoor/ outdoor installations, work in contact with biological agents)
- The number of employees in each work activity

**Posting the annual Security Technicians Work Program to the Labour Inspectorate web portal** with automatic announcement of inspections to both the Inspectorate and the Security Technicians

Notification of Labour Inspections to Labour Physicians and written notification to Labour Inspectorate. Posting of annual Inspection Schedule to the corresponding corporate installations.

Inspections may exceed the minimum requirements for a variety of reasons, such as emergency works that require the presence of TAs for safety advice or notification by employees for unsafe working conditions or investigations of workplace after an accident or nearly to one.

#### TRAINING OF EMPLOYEES

EYDAP, acknowledging the value of safety culture at work, in compliance with Law 3850/2010, Art. 48, and for safeguarding the physical and mental health of its employees, organizes **annual training sessions** at the workplace, keeping a record of these sessions (topics and staff involved). **The trainers are EYDAP Security Technicians.** Emergency training is organized to meet the needs of new staff, the introduction of new technologies, the taking up of new tasks. On-the-job training is always provided free of charge as well as educational material distributed.



# WRITTEN RISK ASSESSMENTS

Written Occupational Risk Assessment (WORA) is a basic legislative requirement of legislation (Law 3850/2010, no. 43) and of the international standards of Safety & Health, for the prevention of accidents (accidents at work and / or occupational diseases) caused as a result of workers' exposure to the hazards of their workplaces and activities.

#### A Written Risk Assessment includes:

- The sources of risk.
- The potential exposure of the employee to sources of risk.
- The evaluation of this risk, its likelihood of occurrence and the seriousness of its consequences.
- Existing and additional proposed measures for incident avoidance

Written Occupational Risk Assessments are intended to be a useful tool in the hands of employees, being uploaded on the Thalassa website and made familiar with on-the-job training, so that all information is put into practice.

#### **WORAs are reviewed:**

- If there is a change in the way the work is performed or if a new job occurs
- Whether new raw materials or new machinery are used
- After an accident at work or occupational disease
- When it is judged that the implementation of new measures differentiates the ultimate risk of the job

The above procedure is carried out **every 2 years**, enabling all employees to participate in the proper collection of data for the proper preparation of WORAs.

From 2009 to 2019 456 WORAs have been prepared.

No revisions of WORAs in 2019.

#### **INVESTIGATION OF INCIDENTS**

All incidents, regardless of scale or impact, must be reported. These include "near misses", so that preventive actions can be taken. "Near misses is recorded

and posted on EYDAP's "Thalassa", accessible for completion by all our employees. The study of those reports strengthens preventive measurement.

The procedure followed for investigating, formulating an opinion on the causative factors of incidents or similar accidents and for identifying occupational hazards includes:

**Autopsy** at the scene of the incident while taking photos

**Investigation** of the incident or the dangerous working conditions

**Communication** with the parties involved **Report to Higher Management** on the hazardous conditions that caused the accident and preventive suggestions for the future.

**Possible modification** of Risk Assessments (WORA) based on findings.

# EMPLOYEES HEALTH COVERAGE

The subject is discussed in the "Employment" section of the same chapter.

#### **Initiatives 2019**

In addition to its legal obligations, EYDAP has taken the following initiatives in order to achieve its 2019 objectives:

#### **Training of workers**

Annual training courses are organized at the workplace of the staff. A record of the training sessions is kept(topics and staff involved). Extraordinary training sessions are organized to meet the needs of new staff, the introduction of new technologies, the taking up of new tasks. Training is always provided free of charge as well as the educational material distributed.

#### In 2019

- Security Technicians held 34 seminars, with a 3-hour duration, at the workplace attended by 354 employees. The corresponding training seminars for 2018 were attended by 333 employees.
- In collaboration with the Department of Education, **2 training sessions**, with a **4**-hour duration were held. 270 employees participated in these seminars.

#### On line communication with employees with Security messages

The purpose of these messages is to emphasize the need for safe working practices, the importance of using PPEs. etc. The topic of the messages is determined by accidents at work or by "near misses" occurring either in the company or in other companies made public in the press and by the results of the Security Technicians' inspections.

#### Organization of the 5th "Health & Safety Conference"

Speakers focused on current security issues that have been the impetus for corporate initiatives in 2020:

- Impact of non-ionizing radiation on employee health Measurements as a protection measure.
- Training in Occupational Health and Safety.
- Health & Safety best practices.
- Building evacuation plans. State of emergency: proper management, staff training.

# ESYPP has been certified for the Occupational Health and Safety Management System

(ELOT 1801: 2008 / OHSAS 18001: 2008 Occupational Health and Safety Management System-requirement), an internationally applied Standard that increases EYDAP's business reputation and promotes its image. Our goal is to control risks and improve our performance.

# Supply of non-ionizing radiation measuring instrument.

In **2019** a non-ionizing radiation measuring instrument was purchased to:

- to measure magnetic field limits around equipment emitting radiation (e.g. substations) and to subsequently designate safety zones around substations
- to ensure compliance of the telecommunication antennas installed in our establishments, with human safety limits.

According to **first measurements results**, the values of electromagnetic radiation in the workplace are low, close to zero, always within the safety limits for humans. The highest values recorded, but again within the permissible limits, regarded old technology cell phones, for which replacement was recommended.



#### **Initiatives - Objectives for 2020**

#### 1.

ESYPP Recertification for the Occupational Health and Safety Management System (ELOT 1801: 2008 / OHSAS 18001: 2008 Occupational health and safety management system – requirement), by an independent Certification Body.

#### 2.

Transition to ISO 45001: 2018 from ELOT 1801: 2008 / OHSAS 18001: 2007.

#### **3.**

Certification of ESYPP for ISO 9001: 2015 "Quality Management System", an internationally recognized standard for quality management to ensure continuous improvement of the services provided to the Company and its employees. ESYPP, through the inspection, training, and consulting program comes in contact with all EYDAP employees and Higher Management contributing to quality of service

#### 4

Supply of a new instrument for physical factors measurement at workplace (heat stress index, relative humidity) to improve workplace comfort conditions (eg lighting, ventilation, etc.).

#### **5.**

Creation of new "EYDAPios" publications. Upgrading of the information and the design of the printed form. Selection of topics based on the newest risk assessment, as emerged from the latest accident investigations.

#### 6

**Procurement of upgraded software** for the submission of Occupational Risk Assessments.

#### 7.

Organization of the 6th **Health and Safety Conference.** 

#### 8.

Continuing **training of staff** on health and safety issues for the upgrading of occupational health and safety culture.

#### 9.

Intensification of collaboration of ESYPP with both EYDAP supervisory engineers and the company's external partners (project contractors) to better assess potential risks per activity and evaluate potential events for a safer work environment for both contractors and employees.

#### 10.

**Revision of PPE specifications** in clothing (colors, patterns, fabrics)

#### 11.

Placing **visitor information plates** at all facilities for the use of Personal Protective Equipment.

#### 12.

Communicate with employees on a monthly basis on safety issues.

#### **OCCUPATIONAL ACCIDENTS**

	2018	2019
Number of fatal accidents	0	0
Number of serious accidents	7	5
Number of accidents at work	11	10
Number of working hours	4,253,160	4,267,176
Percentage of fatalities at work	0%	0%
Percentage of serious accidents at work	0.329167%	0.234347%
Percentage of accidents at work	0.517262%	0.4686940%

A comparison of the results of 2018 and 2019 shows a slight reduction in occupational accidents in 2019.

The continuous upgrade of a health and safety culture at work, through continuous employee training as well as targeted suggestions for practices and working conditions improvment by ESYPP staff have contributed to the reduction of accidents at work in 2019.

EYAAIT

In 2019 there was no mention of an occupational disease.

#### Notes:

- The rate of occupational accidents has been calculated using the number 200,000 hours of work, for comparison with 2018.
- The figures in the Table are derived from the occupational accident Protocol maintained in the IPPS.
- As criterion for the characterization of an occupational accident as serious was considered the absence of an employee from work for a period of more than fifteen (15) days.
- The results of the table apply to all EYDAP employees irrespective of the type of their contract (indefinite period, part-time cleaners, 8-month contract workers, 6-month and 2-month contract students, practicing lawyers, trainee students) not contractors.
- Most frequent injuries concern injured limbs.



# 5.3 Training & Education







GRI 103-2. GRI 103-3. GRI 404-1

#### How do we manage and do we evaluate our approach?

For EYDAP, Sustainable Development is directly linked to the training of its human resources.

The speed of change that characterizes the technological, economic, social and environmental context in which the Company operates makes continuous education a target at both individual and corporate levels.

At EYDAP we believe that employee training contributes not only to their individual growth but also to the establishment of corporate practices as well as to the strengthening of cooperation and corporate identity.

Training programs bring together staff from different fields or specialties, enhancing the exchange of experiences making education a means of disseminating untold corporate knowledge. Training is an investment for EYDAP and a means of enhancing corporate Sustainability.

Selection of educational subjects is organized on:

units (which mainly refer to specific operational needs)

higher Management proposals (which are mainly related to policy implementation)

**new training courses** and human resources professional development approaches (conducted by the Department of Education & Human Resources Development).

Feedback and evaluation of educational work play an important role in the selection of educational topics. The evaluation is done by the trainees at the end of each seminar and also by the Departments at the end of each six-month training period. Questionnaires with closed and open questions are used and examined:

- the success of the courses
- proposals of individual organizational the influence of the courses on improving individual work
  - the overall outcome of the training process in the operation of each organizational unit.

The Human Resources Education & Development Directorate is certified with ISO 9001: 2015 Certified Quality Management System and utilizes a 0.24% OAED / LAEK subsidy, as reimbursement of employer contributions for the training programs.

# 41 educational subjects

(technical, administrative, financial, IT systems, etc.) in 2019 These subjects, which cover new techniques and knowledge on every field of activity of the Company, were implemented in **106 training seminars**, while **711 trained employees** put their knowledge into practice immediately. The courses are conducted either in the morning or in the afternoon in accordance with the professional and personal commitments of the participants.

The following seminars were held on a variety of subjects:

Category of educational subjects	Number of Seminars	Number of Trainees
Networks, Facilities, Technical Subjects	16	237
Administration, Finance, Labor	58	850
IT & Control Systems	32	355

The number of seminars in the category "IT & Control Systems" refers to new cloud systems and technologies, reflecting the Company's continuous commitment to automation and adoption to modern digital governance practices.

Many trainees have chosen training courses and beyond their own field, with the belief that it will help them improve their skills i.e. foreign languages. This may be considered as an important indication of employees' commitment to development and self-improvement.

EYDAP additionally provides its employees with the opportunity to obtain a degree or postgraduate degree or qualification from Higher Education Institutions, covering most of their tuition fees and providing the required by law leaves of absence (14 to 20 days per year).

In **2019**, 15 employees applied for and received a tuition subsidy for their studies. Specifically, 14 employees received a grant for a master's degree program in topics related to economics, management and management strategies and environmental planning.

As part of ongoing training and **corporate outreach**, EYDAP executives are encouraged to attend events, exhibitions or conferences, to participate in scientific conferences with scientific announcements domestically or internationally, with full cost coverage. In **2019**, 115 employees attended workshops, seminars and conferences inside and outside of Greece. The knowledge they gain on new technologies and information in the domestic and international market is immediately applied and a valuable parameter in the growth of the Company.



The Company is open to new and innovative ideas coming from **Educational Institutes** and Research Centers. The Company itself offers know-how on issues related to water treatment, sewage treatment, circular economy, nutrient recovery etc to Municipal Water Supply and Sewerage Companies in the country and abroad.

As for EYDAP's **new employees**, a reception program has been designed and approved along with a manual on the organization of the Company, the Personnel Regulations, the Health Care Regulations, the Working Environment and Safety Conditions, the Employee's Benefits, the Insurance Scheme, the Workers Cultural Center accompanied by a tour to the company's facilities.

#### AVERAGE HOURS OF HUMAN RESOURCE TRAINING PER LEVEL\*\*

	Employees	Total Training Hours 2019	Average Training Hours/ Employee
All Employees*	2,217	11,610	5.24
Men	1,575	6,144	3.90
Women	642	5,466	8.51
Heads of Dpts (+Higher Levels)	253	2,415	9.55
Heads-Men	117	873	7.46
Heads-Women	136	1,542	11.34
Employees	1,964	9,195	4.68
Employees-Men	1,458	5,271	3.62
Employees-Women	506	3,924	7.75
Support Staff Total	189	723	3.83
Support Staff Men	103	301	2.92
Support Staff Women	86	422	4.91
Administrative Staff Total	815	4,488	5.51
Administrative Staff Men	421	1,551	3.68
Administrative Staff Women	394	2,937	7.45
Technical Staff Total	1,213	6,399	5.28
Technical Staff Men	1,051	4,292	4.08
Technical Staff Women	162	2,107	13.01

<sup>\*</sup> The 5 members of Higher Management are not included

<sup>\*\*</sup>Hours refer to actual training hours

# 5.4 Human Rights at Work









GRI 103-2 GRI 103-3, GRI 405-1, GRI 405-2, GRI 406-1

#### How do we manage and how do we evaluate our approach?

The safeguarding of human rights at work and the elimination of discrimination, in all areas of the Company, is a permanent and timely commitment in the context of Sustainable Development.

The Company's personnel is to comply with respect to the principles of legality and professional ethics, following the instructions given each time by the Company's hierarchy and EYDAP Staff Internal Regulations, and in particular Article 5, regarding Staff Behaviour.

Workers' rights to equality and safe work are safeguarded through the Collective Labour Agreements and compliance with Law.

> Company's key concern is to ensure a healthy, safe and pleasant workplace, thus achieving high employee's performance.

The Company supports all employees' personal and corporate development



#### COMPOSITION OF BOARD OF DIRECTORS AND EMPLOYEE BREAKDOWN

	BOARD OF DIRECTORS*					
MEN	<30 years old	30-50 years old	>50 years old			
11 (0.5%)	0 (0%)	5 (0.3%)	6 (0.3%)			
WOMEN	<30 years old	30-50 years old	>50 years old			
2 (0.1%)	0 (0%)	0 ( 0%)	2 (0.1%)			
TOTAL	<30 years old	30-50 years old	>50 years old			
13 (0.5%)	0 (0%)	5 (0.3%)	8 (0.3%)			
	HEADS OF DEPARTMENT	S & HIGHER LEVELS [2019]**				
MEN	<30 years old	30-50 years old	>50 years old			
117 (5.0%)	0 (0%)	30 (25.6%)	87 (74.3%)			
WOMEN	<30 years old	30-50 years old	>50 years old			
136 (6.1%)	0 (0%)	47 (34.5%)	89 (65.5%)			
TOTAL	<30 years old	30-50 years old	>50 years old			
253 (11.5%)	0 (0%)	77 (30.4%)	176 (69.5%)			
	OTHER	EMPLOYEES				
MEN	<30 years old	30-50 years old	>50 years old			
1458	0 (0%)	359 (24.6%)	1099 (75.3%)			
WOMEN	<30 years old	30-50 years old	>50 years old			
506	0 (0%)	198 (39.1%)	308 (60.8%)			
TOTAL	<30 years old	30-50 years old	>50 years old			
1964	0 (0%)	557 ( 28.3%)	1407 (71.6%)			
TOTAL ***						
MEN	<30 years old	30-50 years old	>50 years old			
1575 (71%)	0 (0%)	389 (17.5%)	1186 (53.5%)			
WOMEN	<30 years old	30-50 years old	>50 years old			
642 (29%)	0 (0%)	245 (11%)	397 (17.9%)			
TOTAL	<30 years old	30-50 years old	>50 years old			
2.217 (100%)	0 (0%)	634 (28.5%)	1583 (71.4%)			

<sup>\*</sup>The Board of Directors of the Company consists of 13 persons, as defined in paragraph 1 of Article 11 of the Statute.

\*\*Heads of Departments & Higher Levels: Heads of Departments, Deputy Directors, Directors, Assistants General Directors, General Directors.

<sup>\*\*\*</sup> The percentages in the table refer to 2019 total number of employees and are calculated taking into account all permanent employees.

For all Company's permanent staff there is no gender or age discrimination with respect to basic salary and benefits, always formed in accordance to the Collective Agreement. There has never been child labour or forced labour in the Company and free expression has always been encouraged.

The treatment of all employees **is equal, without any discrimination**. Specifically, out of the 253 employees who hold positions of responsibility, 136 are women. There is a female presence on the Board of Directors. The Chairman of the Board and one more Member are women.

# All employees have the opportunity and are encouraged to participate in educational and training programs.

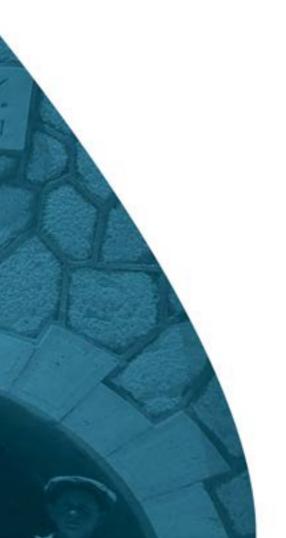
EYDAP has included in its human resources 216 persons (116 men, 100 women), in accordance with the provisions of Law 1648/1986 (Law 2643/98) concerning persons with special needs, children with disabilities, children of invalids of war etc. for which easier access and movement to the Company's premises has been ensured.

The Company's internal portal is a key communication and information channel with free access for all employees.

Company and employee relations are governed by mutual respect, meritocracy and equality contributing to the achievement of the highest possible level of cooperation and common progress. The Company has never faced any issue of unequal treatment, discrimination based on gender, age, religion, sexual orientation, disability etc.







# Creating Value for the Society

# 6.1 Development of Environmental **Conscience & Awareness**











GRI 103-1

# Why is it material?

Sustainability is the key criterion of our strategy, decisions and changes. We aim to areas related to economic, social and environmental challenges by creating new growth opportunities, focusing on Sustainable management of the entire water cycle, reducing our environmental footprint and developing responsible environmental standards.

Societies are gradually turning into more environmental oriented models, the stakeholders are interested in transparency and the citizens tend to acknowledge that they are dealing with environmentally friendly companies.

The continuous environmental burden of the planet is a fact. It is our obligation and desire, as the largest company in Greece that manages the water cycle, to raise awareness to citizens so as to adopt good environmental practices.

The development of environmental awareness helps to achieve the Objectives 3 "GOOD HEALTH & WELL-BEING", 4 "QUALITY EDUCATION", 11 "SUSTAINABLE CITIES & COMMUNITIES", 12 "RESPONSIBLE CONSUMPTION AND PRODUCTION" and 13 "CLIMATE ACTION" as defined by the United Nations, regarding actions that protect our planets natural resources.



# How do we manage it?

The Sustainable Development Goals (SDGs) define and frame the Company's action plan for building a responsible environmental ethic.

#### **EYDAP in 2019:**

- Continued to implement programs and actions aimed to improve its environmental efficiency, both in the field of energy saving, telecommunications network and offices' buildings, as well as in the field of circular economy, applying the principle of "reduction-reuse-recycling" (The subject is analyzed extensively in the section "Creating Environmental Value")
- Highlighted the important corporate archival material, through the operation of EYDAP's Historical Archive, and presented
  the importance of water and infrastructure related to its management in the development of modern societies. In this context,
  EYDAP organized the Anniversary Exhibition for the 90 years since the construction of the Marathon Dam at the
  "Hellenic Cosmos" Cultural Center.
- Participated in **research projects inside and outside Greece**, as well as in conferences to address environmental issues and promote innovative solutions.
- Raised awareness to consumers for the rational use of water through its official social media (Facebook, Instagram, You tube, Twitter, LinkedIn) and its website.
- Continued to implement **educational programs** and informative visits, addressed to stakeholders and students of all levels of education, with the aim to develop environmental culture.
- Cooperated with **University Institutions** for the promotion of innovative and efficient solutions, in the context of partnership between the university community and the production processes.
- Surveyed the **Hadrian's Aqueduct** and conducted studies for the cultural and operational use of the monument, using the resource for urban and suburban use.



On the occasion of World Water Day (March 22), the Company organizes every year festive events and campaigns for the awareness of the public on the rational use of water.

In 2019, there was a media campaign, with the use of audiovisual material, aiming at public awareness on circular economy.

#### **SOCIAL MEDIA**

Since 2013, EYDAP has been active on social media with pages on platforms: Facebook, Messenger, Instagram, Twitter, Linkedin and Youtube.

The development of the pages is achieved with 2 to 3 posts per week, thus reflecting the users' original search for the content of EYDAP pages on social media but also the general corporate image of the Company.

The most successful posts of 2019 concern issues of social responsibility & sensitivity, entertainment – art, culture and EYDAP's Historical Archive.







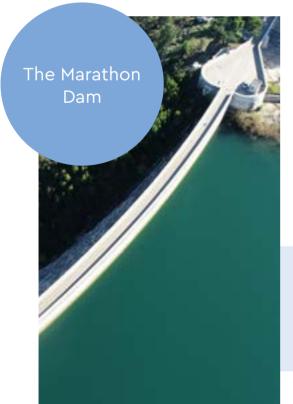


#### **ENVIROMENTAL EDUCATIONAL PROGRAMS**

EYDAP designs and implements in its premises and in adequately designed halls Environmental Educational Programs which are provided free of charge to pupils, students, scientific teams, etc.

• In EYDAP's Water Treatment Plant (WTP) at Galatsi the educational program "The Journey of Stagonoulis" is implemented. With a use of a rich audiovisual material, children are following Stagonoulis in his journey and get encouraged to participate in original group games, to get to know the whole cycle of water and to adopt a responsible behaviour in their everyday life.

EYDAP for this educational program, that is on for about 20 years and is very popular, has received many distinctions and awards. The GOLD AWARD was won in Environmental Awards, declared in the category *Environmental Leadership*.

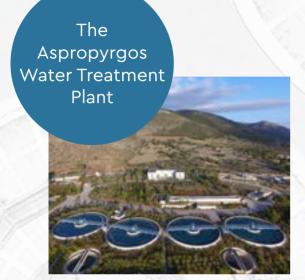


• The Marathon Dam is a visiting destination for schools, universities, clubs and individual visitors. In its well-maintained facilities, historical documentation on the water supply system of Athens since 1929 is presented. An excellently preserved audiovisual material brings to light the different stages of production of this large project and the inauguration of the new water supply system of the Capital of Greece.

The educational visit to Marathon includes a guided tour in the **Water Museum,** where tools and objects of work are exhibited from the time of the construction of the Dam (1926–1929), to the coronation of the Dam and to "the temple" (upon permit) located on the downstream side of the Dam, a copy of the Athens Treasury in Delphi.

Our Target for 2020 is the renewal of the educational program with the incorporation of practices that help specially our little friends to realize the ultimate need that led to the construction of the Dam, the techniques used, the important sub-projects that permitted during the inter war period the supply of Athens with drinking water and lastly to make their own DAMhistories.





• The Aspropyrgos Water Treatment Plant is one of the most modern water treatment plants in Greece. Guided tours for students of almost all levels of education and for other interested parties both from Greece and abroad are organized. Visitors visit the facilities guided by EYDAP staff and attend the program which is formed specifically to corresponds to the educational level and the interests of the visitors.

Water Treatment
Plant of
Psyttalia

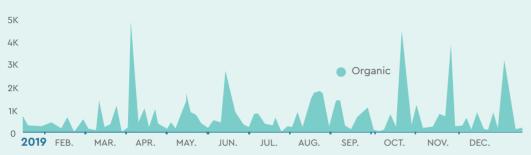
• The Waste Water Treatment Plant of Psyttalia (PWWTP) is one of the most modern Effluent Treatment Units in Europe and receives visitors of all educational levels and specialized scientific groups from Greece and abroad. The visitors are guided in the establishment escorted by trained employees and are informed on the operation of this important plant.

GRI 103-3, GRI 303-1 (2018), EYDAP INDEX

# How do we evaluate our approach?

#### EYDAP PAGES IN SOCIAL MEDIA IN NUMBERS

#### **FACEBOOK TOTAL REACH 2019**



(source: https://www.facebook.com/eydapgr/)

# f.

11,420 total number of followers from the beginning until 31.12.2019

11,453 total page likes from the beginning until 31.12.2019

**69,319 total reach**since 1.1.2019 until 31.12.2019

#### PARTICIPATION IN ENVIRONMENTAL EDUCATIONAL PROGRAMS

7,200 students
from 110 schools
attended the
educational program
"The Journey
of Stagonoulis"

at the
Water Treatment Plants
in Galatsi

2,741 students and 805 people from 11 institutions visited the Marathon Dam

the students came from **32** schools and the rest from **11** institutions 263 people
were guided in the
Water Treatment
Plants
in Aspropyrgos

out of which
30 school students,
208 university students
and 25 delegates

542 visits
at the
Psytallia
Wastewater
Treatment Plant

out of which

12 visits from domestic and foreign higher education institutions (268people)

**4** visits from secondary education schools (113 people)

**3** visits from special scientific interest group (96 people)

**4** visits of scientific bodies from abroad (58 people)

visit from the Czech Water Company (7 people)



# 6.2 Actions of Social Solidarity& Preservation of CulturalHeritage



















# **Grant opening for EYDAP Historical archive**

2019 was a distinct year for EYDAP Historical Archive as it first opened its doors to the public.

EYDAP, on the occasion of the 90th anniversary of the inauguration of the Marathon Dam on October the 25th, 1929, an important technical project for Greece in the interwar period, organized the Anniversary Exhibition «The Great Challenge: 90 Years of the Marathon Dam», based on evidence from its historical archive. The exhibition was hosted at the "Hellenic Cosmos" Cultural Centre.

The **inauguration ceremony** took place on November the 11th, 2019, and was attended by government representatives and representatives of all our stakeholders. The opening was held by the Minister of Infrastructure and Transport, Mr Konstantinos Ach. Karamanlis. The exhibition was to last until February 7th, 2020, but due to large participation it was extended until March 29th, 2020.

The Exhibition seeks to highlight the major challenges the construction of the Dam and its additional projects posed: the Boyati Tunnel, the first water treatment plant in Galatsi, the first extensive water supply system of Athens, Piraeus and suburbs, the people who worked for in the construction site and under what conditions they did so.

We considered this anniversary as the most appropriate condition to present the important role of a complete water system as a factor of culture and development and as an opportunity to strengthen our Corporate image.

The exhibition was accompanied by a **special logo** that was integrated in our print publications and our posts on social media.





The "narrative" of the Exhibition includes audiovisual material with a 3D representation of the Dam construction, an extract of a silent film of the era with footage from the construction site, original architectural drawings and maps, numerous photographs, historical documents, objects used for the construction. The exhibited items were restored by the specialized Department of Western Attica University.

A particular event was set up at the entrance of the Exhibition especially for our young visitors. An alternative way to engage them to discover and collect information by focusing on what impressed them the most, so that they could tell their own unique DamStories. Guide to this journey are 4 fantastic heroes, illustrated on a bookmark, encouraging them to further explore the exhibition.

As part of this action we have also launched, on the corresponding inauguration date (25 October 2019,) a Series of Collective Postal Stamps, in collaboration with the Hellenic Post (ELTA).

These series were made available at the Hellenic Post

- to consumers for common use
- to philatelists as a collectible edition

Open guided visits were organized for the public as well as for the Company's employees. Private visits were also organized for representatives of large companies and Local Authorities, hosted by EYDAP Managing Director Mr. Charis Sachinis, Deputy Managing Director Mr. Anastasios Tossios and the President of the Board of Directors Mrs. Theodora Varvarigou.

The management team of the Historical Archive of EYDAP undertook this great effort, from its conception to its completion, while the exhibition was curated by the architect – museologist Mrs. Erato Koutsoudakis.







## **EYDAP Historical archive**

The histrory of EYDAP dates back to 1925. With a successive history of 94 years (AEEY, OAP, EYDAP) the Company is inextricably linked with many important projects, that have ensured over the years the residents of Attica with drinking water of excellent quality and reliable and uninterrupted wastewater services.

The establishment of a Corporate Policy for Historical Archive Management in 2018 reflects the Company's commitment to the unified management of this important legacy, with the ultimate goal of preserving, highlighting and utilizing historical evidence.

EYDAP preserves and digitally records all kinds of evidence such as technical or administrative documentation, maps and drawings, photographs, other visual material and various objects dating from the early 20th century, following the international standard «Dublin Core". The Company aims to create the appropriate conditions for the preservation of the original physical form, to digitize on the basis of international standards for the greatest possible preservation and safeguarding of the digitized material of historical importance. The digitization of the material is completed, with the digital archiving and documentation.

The historical archival refers to the Hadrian Aqueduct, the construction works of the water supply system of Athens-Piraeus and Neighbouring Areas (1925–1931), the irrigation works of the Serres and Drama plains (1929) and the construction of Yliki and Mornos.

In 2019 the collection, evaluation and documentation of historical material continued. Our target is to follow the best international practices.

Historical Archive Enrichment: EYDAP's Oral History Team, in collaboration with Clio Muse, is in the process of creating a **digital tour** that will «bring to life» the stories of the Marathon Dam construction workers.

Our goal for 2020 is to cooperate with University Bodies, in a mutually beneficial and innovative process.





### ADRANIAN-ROMAN AQUEDUCTS IN EYDAP WATER SUPPLY SYSTEM

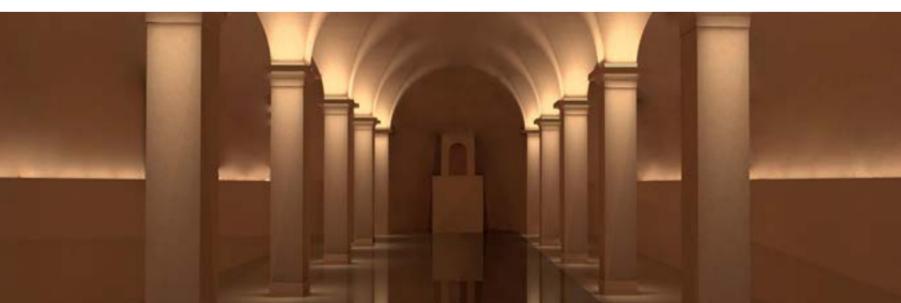
The Hadrian Aqueduct was built between 125 and 140 A.D for the water supply of Athens. It is a 20km underground tunnel still collecting water from underground aquifers and streams, along its axis from Parnitha to the reservoir – Dexameni at the respective square. The Hadrian Aqueduct passes through the Municipalities of Acharnes, Metamorphosis, Heraklion, Amaroussio, Chalandri, Psychiko and Athens. The entrance to Dexameni was adorned with an inscribed arched propylon. Today, part of the inscribed propylon is set in the National Garden.

This aqueduct was rediscovered in the 1870s, when the main tunnels were cleaned and reused for the supply of Athens. During the same period Dexameni was renovated. The construction of the Marathon Dam decreased the use of aqueduct. It ceased completely during World War II.

In 2019 the following Studies were conducted:

- **Underground mapping of the aqueduct** in collaboration with National Technical University of Athens
- Master Plan & Business Plan for the use of aqueduct water for non-potable use, including 20 pumping points along its route, within 1 km radius.
- Proposals for **green and cultural restoration** of 20 points of interest of the aqueduct.





As an offer to cultural and environmental awareness we consider the:

- **Planning of a conference** on the Hadrian Aqueduct in collaboration with the Ephorates of Antiquities and the National Technical University of Athens.
- Scientific support to the postgraduate program «Museum studies» of the University of Athens on the design of EYDAP for the regeneration of Dexameni Square and to 2 students with a thesis on the Hadrian Aqueduct.
- Speeches organized at the Swedish Institute and at 2 schools (Heraklion and Acharnon).
- Collaboration on a postdoctoral program of the German Institute of Athens, organizing a guided tour along the Aqueduct.
- Participation in innovation proposals and **programs and collaboration with research centers**. Specifically: proposals to the European Union's UIA and Horizon 2020 programs, cooperation in the Pioneers in Action program.
- Collaboration with the Penn Design-Apomechanes Graduate School of Architecture Summer School in Greece and public presentation of its research.
- Guided tours at Dexameni of students, teachers and other institutions.

# In 2020 we aim to record further progress in the projects:

- regeneration of Dexameni and Dexameni Square in a place that will promote the aqueduct and the waterways of the city. Illumination of the interior of the spectacular enclosed reservoir. Completion of studies for the total renovation of Dexameni. Finalization of project funding.
- water use of the Aqueduct. Completion of application studies and comencement of implementation in the Municipality of Chalandri once the UIA (Urban Innovative Actions) funding program is approved.
- enhancement of our contribution to formal and informal learning procedures and to environmental awareness through the Hadrian Aqueduct, taking initiatives as the Conference at the Acropolis Museum and organized tours and presentation on Andrian Aqueducts.

# **Social Solidarity Initiatives**

In 2019 EYDAP maintained its sponsorship program for covering social needs. The Company aimed at young people and expanded its support to education, culture and sports structures.

The implementation of social solidarity actions by EYDAP is linked to UN Objective 1 for the eradication of poverty and the provision of sustainable living conditions, with Objective 3 "Good Health and Wellbeing", with Objective 4 "Quality Education", 6 "Clean Water and Sanitation", with Objective 9 "Industry, Innovation & Infrastructure", with Objective 11 "Sustainable Cities & Communities" and Objective 13 "Climate Action".

### Specifically, EYDAP provided in 2019 consistently:



Financial support to vulnerable social groups



Sponsorships
to schools
and universities,
as well as financial
support for scientific
conferences



Sponsorships to sports and cultural associations



Assistance
in the social and
cultural work
of municipalities
in and beyond
Attica



Financial support
and provision
of know-how
to bodies and
organizations whose
work has social and
environmental
implications

The total amount spent by EYDAP in **2019** through its sponsorship program amounted to € 139,307.96 and is allocated as follows: 16% grants for education and scientific conferences, 36% for financial support to sports and cultural associations, 8% for financial support to municipalities and 40% to support actions and bodies with recognized social and environmental work.

Our goal for 2020 is to establish a Sponsorship Policy that will set the boundaries, will introduce the online registration of applications and innovate by implementing a Scholarship Program.



## SUPPORT FOR VULNERABLE SOCIAL GROUPS

EYDAP, committed to the principles of Sustainable Development and in the context of its corporate social responsibility, takes important initiatives, beyond the Regulatory Framework, aiming at the relief of vulnerable groups through its applied pricing policy. The aim is to safeguard water as a public good, accessible to all citizens.

As value return to society should also be considered the company's ongoing pricing policy initiatives (e.g. special pricing, discounts for large families and elderly households, discounts on increased bills as well as in illegal water collection bills after following the specific and approved procedures by EYDAP's Board of Directors, based on social and income criteria, repayment of debts in installments by providing payment facilities to consumers belonging to financially weaker groups – beneficiaries of KOT, EET).

The issue is discussed extensively in the «AFFORDABLE PRICING» section.

# SUPPORT TO EDUCATIONAL ENTITIES WITH DONATIONS TO SCHOOLS AND UNIVERSITIES AND FINANCIAL SUPPORT FOR THE ORGANIZATION OF SCIENTIFIC CONFERENCES

In the field of education, the Company, **responding to requests from schools**, proceeded in 2019 with:

The purchase of new electronic equipment to meet the needs of schools within and beyond Attica

The sponsoring of technical equipment

The provision
of financial support
for educational
school trips, in and
out of Greece, part of
a special educational
programs

The financial support of pupils and students for educational seminars

The Company, responding to the needs of **higher education institutions and scientific bodies**, proceeded to donations for the promotion of research and knowledge.

### Specifically, EYDAP granted:

- the research program of the Aristotle University of Thessaloniki for Toxicological Analysis of EYDAP Liquid Waste
- the Hellenic Association of Chemical Engineers
- the 4th Conference of Lawyers
- the Department of Civil Engineering Sector of Hydraulics, Aristotle University of Thessaloniki
- the organization of the 4th Delphi Economic Forum
- the «Energy and Water» one day conference, organised by the Academy of Athens
- Aristotle University of Thessaloniki for research conducted by his research laboratory on the environmental consequences of the fire in Mati in 2018
- the conference organized by the Center for Integrated Water Management (KEODY)
- the 110 ICOLD European Club Symposium
- the 3rd Hellenic Conference on Dams and Reservoirs
- the 17th Annual CSR Conference
- the 1st Water Forum
- the Water Conference 2019
- the 7th CEMEPE & SECOTOX International Environmental Conference

#### SPONSORSHIPS TO SPORTS AND CULTURAL ASSOCIATIONS

EYDAP, in its effort to **promote culture and development,** funded sports and cultural associations that contribute to social well-being.

Specifically, EYDAP provided financial support:

- to the major international organization "Olympians Run for 2019" under the auspices of the Ministry of Tourism / EOT
- to the Greek Fencing Champion for its participation in the Fencing World Program
- at the Athletic Federation of Kidney and Transplant
- to the Hellenic Basketball Coaches Association to support its work
- to the Doric Delphi Association
- to the New Greece Symphony Orchestra for the promotion of new talents
- to the Varnava Folklore Society for the promotion of its work
- to the National Opera for the promotion and dissemination of her artwork to the public
- to the Kalamata Experimental Stage for the organisation of the 3rd Puppet Theater Festival
- to EKSTAN Friends of Arts Association for the promotion of theatrical education and culture
- to the sports and cultural club "Wellness" (Evexia)
- to the organization of the mountain race Bike Odyssey

#### ASSISTANCE TO SOCIAL AND CULTURAL MUNICIPAL PROJECTS IN AND OUT OF ATTICA

For the **implementation of social, cultural and environmental actions** with an impact on local communities, EYDAP financially supported:

- he Marathon social grocery
- the purchase of sports equipment distributed in Marathon Municipality schools
- the Nafpaktsian Federation
- the organisation of the Nikaia Disability Swimming Day Agios Ioannis Rentis
- the 7th Marathon Lake Road Race
- the sports & cultural event «Kallithea Run 2019» of the Municipality of Kallithea
- the Sports Football Club Keratsini Athletic Club
- the Vari Swordsmanship Club
- the Basketball Athletics Academies and the Panhelefsis Sports Club
- the Seminar organized by the Marathon Association «The Savior» held in the framework of an information program implemented by the Ministry of Digital Politicy
- he Parents and Guardians Association of Amphissa High School
- the Cretan Association of Perama «The Battle of Crete»

#### FINANCIAL SUPPORT TO ORGANISATIONS WITH SOCIAL WORK AND INFRASTRUCTURE PROJECTS

targetting the fight against inequality and poverty, the development of health structures and the awareness of local and broader society on social and environmental issues.



#### In the context of its Social Policy, EYDAP:

- successfully continues the provision of its specially designed services for people with visual impairments, i.e. specially designed bills (in braille format, large fonts), sms, email
- gave free water throughout 2019 to the areas affected by the big fires in the Municipality of Marathon (Mati and Ano Voutza) and Municipality of Rafina (Red Port)
- donated money to the Aretaio Hospital for the purchase of medical equipment
- donated money to the 2nd High School of Nea Ionia for their educational excursion
- provided financial support to the Fokida Police Officers Association
- financially supported the social work of the Holy Trinity Church of Rafina
- donated money for the organization of the 4th International Symposium for Disfigurement Monitoring JISDM
- · donated money for an excursion organized by the 1st High School of Gerakas to a school in Patras with deaf children
- donated money to the 102nd Athens Elementary School for the purchase of electronic equipment
- financially supported the Hellenic Deaf Athletic Federation
- donated money for the camp organized by the Metropolis of Nikaia
- granted an amount for the purchase of seats at the Police Station at Metamorphosis

# In 2019, EYDAP granted charitable billing to:

- The Love Link "Saint Crisostomos": 3 water connection
- Church of Greece : 144 water connections
- Holy Catholic Ciocese of Athens:2 water connections
- Holy Metropolitan School of Peiraious – institution Saint Polikarpos Saint George:
   1 water connection

# MEMORANDUM OF EYDAP COOPERATION WITH THE MUNICIPALITY OF ATHENS

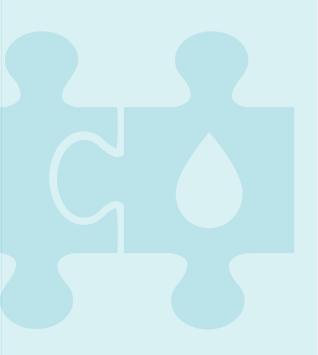
#### **BLUE FOOTPRINT**

Expansion of the cooperation agreement between EYDAP and the Municipality of Athens for the evaluation of the latter's blue footprint and for the protection and use of the Tanks at Dexameni Square in Kolonaki.

In 2018, public fountains were installed in the city center to allow citizens free access to drinking water.

# DESIGNING A EUROPEAN SEWERAGE SUPPORT COMPANY SUPPORT TOOL TO ACHIEVE THE SUSTAINABLE DEVELOPMENT GOALS 2030

EYDAP participates in the design of an EU funding tool for non-profit synergies to strengthen water supply and sewerage services among companies in Europe, Africa and Asia. This tool is part of the SDG6 and SDG11 Sustainable Development Goals for Water and Sustainable City. EYDAP participates as a member of the UN GWOPA / Un-Habitat Steering Committee.







# **GRI Table of Contents**

GRI 102-55

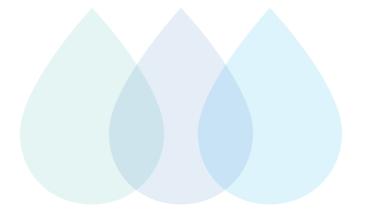
# **GRI INDEX**

GRI Standard	Disclosure	Page	
101 - FOUNDATIO	PATION		
102 - GENERAL I	DISCLOSURES		
102-1	Name of the Organization	20	
102-2	Activities, Brands, Products & Services	20,44	
102-3	Headquarters	20	
102-4	Area of Service	20,44	
102-5	Ownership & Legal Form	20	
102-6	Markets Served	20, 44	
102-7	Size of Organization	20, 44	
102-8	Information on Employees and other workers	162	
102-9	Supply Chain	20, 46	
102-10	Significant Changes in the Operation of the Organization or the Supply Chain	46	
102-11	Integrated approach or Precautionary Principle	46	
102-12	Third Parties Initiatives	50	
102-13	Associations, National & International Support Organization	20,50	
102-14	Statement of the President of BoD, of the CEO & the Deputy CEO	5, 6, 7	
102-16	Values, Principles & Behavioural Norms of the Organization i.e. Code of Behaviour, Code of Conduct	20, 29, 38	
102-18	Governance Structure Organization	20	
102-22	Composition of the BoD & Committees	20	
102-31	Review of Financial, environmental and Social Issues	20	
102-40	Stakeholders' Groups participated in consultation	54	
102-41	Percentage of workers under a Collective Agreement	162	
102-42	Criteria for the Identification & Selection of the Stakeholders participated in the consultation	54	
102-43	Approach to stakeholders consultation	54	
102-44	Basic issues and concerns arisen during the stakeholders consultation procedure	54	
102-45	Entities included in the consolidated financial statements or other relevant statements of the Organization	20	
102-46	Procedure followed for the identification of the Content and Boundaries of the Report	56	
102-47	Material Topics Recognized in the Content definition procedures	56	
102-48	Restatement of information	8	
102-49	Key changes in the Object of Boundaries of the issues regarding previous reference periods	8	
102-50	Reference Period	8	
102-51	Date of most recent report	8	
102-52	Reporting Cycle	8	
102-53	Contact Person for queries relevant to the report of its content	8	
102-54	Claims for the accordance with the GRI standards	8	
102-55	GRI content index	8	
102-56	External Assurance	8	

FINANCIAL STA	NDARDS			
103-2		138		
103-3		140		
205-1	Fighting Against Corruption			
205-2				
205-3				
ENVIRONMENTA	AL STANDARDS			
103-1		64		
103-2		66		
103-3	Access to Clean Water, Sustainability of Water Resources & Water Supply Coverage Water Supply	70 70		
303-1		70		
303-3		70		
103-1		146		
103-2		147		
103-3	Solid Waste Management (Circular Economy)	151 151		
302-5		151		
306-2		151		
103-1		136		
103-2		137		
103-3	Marine Environment Protection (Effluent Treatment)	138		
305-6		138		
306-5		138		
103-1		140		
103-2		141		
103-3	Environmental Compliance	142 142		
305-5		142		
307-1		142		
303-1		143		
303-2	Biodiversity Protection	143		
304-1		143		
103-2		155		
103-3	Energy Saving	155		
302-5		155		
SOCIAL STANDA	ARDS			
103-2		160		
103-3		162 162		
401-1	Employment Employment	162		
401-2		162 162		
401-3		162		
103-1		168		
103-2		169		
103-3		169 169		
403-1				
403-2		169		
403-3		169		
403-4	Health & Safety of Employees	169		
403-5		169		
403-6		169		
403-7		169		
403-8		169		
403-9		169		
403-10		169		



103-2			
404-1   103-2   176   176   176   103-3   179	103-2		176
103-2 103-3 405-1 405-2 406-1 103-1 103-2 103-3 103-2 103-3 103-1 103-2 103-1 103-1 103-1 103-1 103-2 103-1 103-2 103-2 103-3 103-2 103-3 103-2 103-3 103-2 103-1 103-2 103-3 103-1 103-2 103-3 103-1 103-2 103-3 103-1 103-2 103-3 103-1 103-2 103-3 103-1 103-2 103-3 103-1 103-1 103-2 103-3 103-1 103-1 103-2 103-3 103-1 103-1 103-1 103-2 103-3 103-1 103-2 103-3	103-3	Training & Education	
103-3	404-1		176
103-3	103-2		170
405-2	103-3		
179	405-1	Human Rights in Workplace -Diversities & Equal Opportunities	
103-1   103-2   103-3   82   87   87   87   87   87   87   87	405-2		
103-2	406-1		179
103-3	103-1		80
Health & Safety of Consumers - Water Quality (Water Supply)   87   87   87   87   87   87   87   8	103-2		
SOS-1	103-3	Harling Co.	
## 103-1   103-1	303-1	Health & Sarety of Consumers – Water Quality (Water Supply)	
EYDAP INDEX   97   103-1   103-2   113-1   113-1   113-2   113-3   Environmental Awareness   189   1	416-2		
103-2	EYDAP INDEX		
103-2	103-1		0/
103-3   112   113-1   184   185   185   189	103-2		
112   112	103-3		
112   112	303-1		
112   112	303-2	Health & Safety of Consumers (Sewerage Services)	
416-1 416-2  EYDAP INDEX  112  103-1 103-2 103-3 103-3 103-3 Environmental Awareness 189 EYDAP INDEX  Actions of Social Solidarity & Preservation of Cultural Heritafe  190	307–1		112
EYDAP INDEX       112         103-1       184         103-2       185         103-3       Environmental Awareness       189         303-1       189         EYDAP INDEX       Actions of Social Solidarity & Preservation of Cultural Heritafe       190	416-1		112
103-1	416-2		112
103-2	EYDAP INDEX		112
103-2       185         103-3       Environmental Awareness       189         303-1       189         EYDAP INDEX       189         EYDAP INDEX       Actions of Social Solidarity & Preservation of Cultural Heritafe       190	103-1		107
103-3         Environmental Awareness         189           303-1         189           EYDAP INDEX         189           EYDAP INDEX         Actions of Social Solidarity & Preservation of Cultural Heritafe         190	103-2		
EYDAP INDEX Actions of Social Solidarity & Preservation of Cultural Heritafe 190	103-3	Environmental Awareness	
EYDAP INDEX Actions of Social Solidarity & Preservation of Cultural Heritafe 190			
	EYDAP INDEX		189
	EYDAP INDEX	Actions of Social Solidarity & Preservation of Cultural Heritafe	190
103–1	103-1		116
103-2 Affordable Pricing	103-2	Affordable Pricing	117
EYDAP INDEX 124	EYDAP INDEX		124
103-1	103-1		72
103-2	103-2		
103–3 Reliable Network & Water Efficiency (Water Supply) 74	103-3	Reliable Network & Water Efficiency (Water Supply)	
303–1	303-1		
	EYDAP INDEX		74





## **EYDAP SA** ATHENS WATER SUPPLY AND SEWERAGE COMPANY SA

156, OROPOU STR. GALATSI, 11146











