

Sustainable Environmental, Water and Energy Solutions

AQUAPROFIT is an international company providing consultancy, engineering and management services in the fields of Water, Environment, Tourism & Regional Development and Energy.

Aquaprofit Engineering, Consulting and Investment Company is a Hungarian owned SME. Due to its excellent staff composition made up of water engineers, hydrologists, hydrogeologists, geologists, landscape architects, environmental and civil engineers, economists, Aquaprofit Co. is market leader in water management and environmental protection in Hungary. The company has more than 60 full-time employees and over 30 consultants on time contracts, offering expertise in drinking & thermal water supply and protection, waste water treatment, geothermal utilisation and hydrogeological modelling, flood protection. Moreover holds experience in urban and rural development and green and blue infrastructure designs.

Aquaprofit Co. has substantial experience in developing, managing and assisting international collaborative projects (Europaid, IPA, PHARE CBC, CIP-IEE, FP7, LIFE+, GEF, etc.).

Locations

The headquarter is located in Budapest, Hungary, supported by 4 more offices located in Hungary, moreover, in Romania (Csíkszereda), China (Shenzhen) and a branch office in Belgium (Brussels).

Our Clients

Our client list includes the European Commission, national and local governments, clusters and state owned companies as well as private enterprises and engineering companies.

Drinking water
Mineral water
Thermal water
Medical water
Industrial water
Surface water
Groundwater





History & Mission

Our mission is to protect public health, property, and enhance the sustainable environment by providing drinking water quality protection and improvement, wastewater conveyance, treatment, and flood management services for the state and federal regulators, non-governmental organizations, local units of government and the private sector.

The visions to unite the settlements with its water environment, creating a green legacy for future generations, while finding a balance between ecology, economics, and equity.

AQUAPROFIT was established in 1994 by Mr. Tamas Nadasi and Mr. Peter Udud who, since then, have been the Chairman of the Board and the CEO of the company.

"...Water is life's mater and matrix, mother and medium. There is no life without water..."

Albert Szent-Gyorgyi - Hungary Nobel Prize for Medicine, 1937

Expertise

AQUAPROFIT is engaged in several application of water, including water source protection, drinking water quality improvement, development of thermal and medicinal baths and establishment of mineral water bottling plants.

Based on the unique market experience and staff composition, the company is able to provide complex solutions from project and proposal development, through finding the right financing instrument until project implementation and construction.

So far, with our services, our partners obtained a total of non-refundable subsidies in excess of 150 million EUR.



Main services

Environmental and Water Management

- Programs to assess, evaluate and improve drinking water quality (planning, design and implementation, including construction)
- Environment and water source protection, sustainable water use (feasibility studies in environment and water basin conservation),
- Hydraulic construction planning
- Water supply systems
- Flood protection through regulation plans for lakes and running waters
- River and floodplain rehabilitation
- Renewable energy sources engineering
- Geothermal energy

Regional Development and Tourism Division

- Thermal baths development
- · Health and medical and eco-tourism
- Urban planning, green and blue infrastructure designs
- Complex landscape management and rural development plans
- Provide a green solution for our clients combining achievements in the fields of water -, energy and environment.

Project Financing Division

Development and management of EU-funded projects and contracts under various programmes (FP7, LIFE, CIP-IEE, CIP Eco-innovation, EuropeAid, etc.) mainly on the field of water, environment, energy and tourism.

Assessing and improving the quality of drinking water

The goal is to evaluate the quality of drinking water and based on the assessment to design how to improve that and later conserve the required quality.

- Assess the status of the environment
- Evaluate the quality of drinking water at present
- Prepare feasibility studies
- Design and plan the wells, water supply and water treatment plants water purification systems



Reference

Programs to assess and improve the drinking water quality in the Hungarian Great Plain

Aim of the projects is to improve the quality of drinking water in certain parts of Hungary. Approximately one fifth of the Hungarian settlements have water quality issues. This means tap water contains higher proportion of certain contamination (e.g. arsenic, boric, fluorine, and nitrate) than what the threshold limit is.

Facts about the project

- 402 settlements covered
- 666 976 people concerned
- 14 sub projects
- Period: July 2006 March 2011
- Value of the project: Euro 326,5 million

Aquaprofit's work included

- Assess all settlements and regions having drinking water quality issue
- · Evaluate the quality of drinking water
- · Define the necessary interventions
- Optimise financial resources
- Project management coordinating the implementation
- · Monitor the operation of the pipelines

Environmental protection

Water source protection and sustainable water usage

It is crucial for both the society and the economy to preserve the quality and quantity of the available water sources. It is important for all committees to search for, explore and utilize new water sources (drinking, mineral and thermal water) amotect the already known water sources. Our company has long experience and outstanding results in water source protection and monitoring.

Reference

Zalaszentgrót bottling plant of CCHBC Magyarország Kft.

Aim of the project is to achieve dual utilization – to bottle mineral water and utilize the heat of the thermal water by sustainable, environment friendly solutions. Our company worked on obtaining mineral water qualification for the water of the thermal well and designed and implemented the heat pump system which extracts heat from the thermal water of 31,7 Celsius to be utilized in the nearby thermal bath.

During these projects we are undertaking the following tasks:

- Prepare complex geological, hydro-geological and geophysical studies
- Evaluate the environmental impacts of the water extraction
- · Complex analyses of the water explored
- Obtain all licenses
- Design and plan of the bottling plant, coordination of the implementation
- Define the protection zone and tasks to protect the water sources
- Define the terms for sales and distribution of the bottled mineral water



Steps of the project

- Water source research, water supply survey
- Design and obtain establishment and production permits for the production well
- Technical supervision of the drilling
- Providing water analyses
- Obtaining mineral water qualification
- Define the protection zone for the water source
- Design and implement the water supply system with a capacity of 34 cubic meter/ hour
- Extract and utilize heat by a heat pump system generating energy which equals to burning natural gas of 60 cubic meter/hour
- Design and implement a stainless steel incoming pipeline of 1,8 km

Complex water protection

In order to preserve our environment and protect the quality and volume of water, impacts of human interventions have to be minimised.

Aquaprofit has participated in several complex projects concerning environment and water protection at the same time.

Reference

Kis-Balaton Water protection System

Aim of the project is to improve and preserve the water quality of Lake Balaton on the territory of a national park while maintaining nature preservation and flood protection.

During these projects following tasks are undertaken:

- Environmental impact assessments
- Obtain construction licenses
- Compilation of tender documents for the finan-
- Prepare the operations regulations
- Compile detailed and prefeasibility studies
- Dissemination

Results of the project

- A water reservoir area of 18,46 square km,
 54 sq km of wet land
- Total phosphor content flowing into Balaton decreased by 8%, nitrogen content decreased by 11%.
- Living area has grown by 140 hectares



Facts about the project

- Value of the project is HUF 6147 million. (Euro 22,8 million.)
- Area concerned: high priority tourist and conservation area: Balaton Highland National Park,
- Communities concerned: 33 thousand people in 13 settlements
- Construction: renovation of already existing objects (damns, pumping stations), construction of 20 new subjects and new embankments of 6851 m as well as new channels of 6917 m.

Flood protection

It is an overall interest of all communities to live in peace with nature and minimise the damage of interventions of natural disasters, such as floods.

Reference

Danube Project – (structural flood protection):

Aim of the project is to protect people and their properties in the Danube basin.



Facts about the project

- Value of the project is HUF 30,1 billion.
 (app. Euro 110 million.), 85% of the grant is EU fund, the rest is covered by Hungarian funds
- Communities concerned: 510 thousand people,
 43 settlements
- Value of properties to protect is HUF 4563 billion. (Euro 16 billion.)
- Objects included: 12 flood protection bays, 14 flood protection sections, app. 200 km-s of dams, 25 different water management landmarks, 2 protections centres
- Schedule of the project: it started in 2008 and altogether 7 years including the implementation

During these projects following tasks are undertaken:

- Prepare a status report of the existing flood protection network, selection of the proper flood protection concept/method/tools, applying the space for river concept, structural flood protection.
- Define the parameters of the flood protection objects
- Define the materials and tools needed for the protection objects
- Obtain construction and water construction and operation licensees, documentation, prepare environment studies and feasibility studies, cost benefit analyses
- Obtain licenses
- Compilation of tender documentation
- Organise information events for the communities, inhabitants and the experts, PR activities
- Provide project management and monitoring, follow up

Development and protection of water sources for mineral water bottling

For mineral water bottling plants it is crucial to identify a high quality water source with sustainable capacity. Aquaproft Co. provides a full scope of services from planning and exploration till implementation and operation.

Reference

Kékkút Mineral Waters Co. – Nestlé Waters Hungary

Aquaprofit Co. have been cooperating with Kékkút Mineral Waters Co. for more than 15 years. As a result high quality water sources have been explored and mineral water has been bottled in a closed system with the latest technical solutions and minimal losses.

Sustainable operation is guaranteed by designation of protective belts of water sources and by a monitoring system consisting of 51 objects, based on steady observations.

Facts about the project

- 17 production and observation wells
- covering three mineral water sources
- 51 objects in the monitoring system
- 3900 m of stainless steel pipeline
- more than 15 years of cooperation

Implementation

- Overall implementation of the designed facilities;
- · Installation of the monitoring network

Operation

 Operation of the monitoring system, regular measurements, tests and evaluations

Goals:

- Exploration and construction of mineral water sources (Nestlé Aquarel);
- Identifying water meeting the strictest requirements;
- Modernization of the existing technological system, reduction of water losses;
- Complex monitoring system for sustainable development and protection of natural assets

Tasks completed:

State assessment

- Complete geological, hydro-geological and geophysical tests;
- Environmental impacts assessment of the water production;
- Complete analysis of explored water

Preparation

- Expert's opinions on water production
- Report supporting the decision-making procedures (water management concept);
- Permit plans and construction drawings (well, well pump house, well-head, side pipe, energy supply and control system);
- Obtaining authority permits
- Acquiring the mineral water qualification and expert's view on mineral water
- Designation of the protection zones, tasks related to the protection of water sources





Tourism developments

Aquaprofit's expert team has participated in several spa developments across Hungary in order to assist in providing high quality spa services in internationally recognized Hungarian spas and meet the highest expectations of both the domestic and international visitors.

Reference

Sárvári Gyógyfürdő Kft – Spa and Hotel Complex in Sarvar

Aim of the project is to attract international guests and increase the number of domestic guests by enlarging the spa and the water amusement park and construction of a four star hotel connected to the spa. To achieve these goals Aquaprofit prepared a long term development plan for the Sarvar Bath Ltd., implemented the developments, managed the project and engaged an investor.

These projects include the following tasks:

- Prepare tourism development concept of spas
- Prepare the marketing, financial and visual design plans as well as feasibility studies
- Design and plan the water supply protection and the energy supply
- Identify the necessary medical technology
- Prepare license, tender and implementation plans
- Identify investors and outline the conditions for their participation



Results of the long term cooperation

- Value of the Project is HUF 2997 million (Euro 11 million.)
- After the modernisation of the spa in 2002, a four star hotel (Park Inn) was built in 2006.
- Spa and waterpark developments: 16 pools outside, inside, children's pool and splash pool, slide park
- Water surface: 5400 sqm
- · Health and Fitness sections
- Visitor number in 2010: 510 596

International cooperation

Based on the above experience we are confident to enter the international markets to successfully utilise our knowledge for international developments.

Aquaprofit Co. has substantial experience in developing, managing and assisting international collaborative projects (Europaid, IPA, PHARE CBC, CIP-IEE, FP7, LIFE+, GEF, etc.). Therefore, the company is ready to participate in upcoming collaborative projects in the field of sustainable water, environment management, tourism and rural developments.

For further information about us and our work pleasevisit our web site: www.aquaprofit.com and contact our headquarter.