

For 130 years in the service of the community



On November 8, 1892, the Water and Sewerage Plants of the City of Cluj were established, which took over from the Francisc Iosif University established exactly 20 years before, a patrimony formed from an underground source near the current Garibaldi Bridge, a pumping station, a 140 m³ tank, 4 km of water distribution network with 80 connections and approx. 400 m of sewerage.

So from the beginning, the destiny of the institutionalized activity of water distribution and sewerage of Cluj was closely intertwined with that of the local University, today Babeș-Bolyai University.

Today Someș Water Company SA, the proud heir of the Water and Sewerage Plants of Cluj, is one of the largest regional companies in Romania, serving a population of almost one million people in eight municipalities and cities and 298 localities rural areas in Cluj, Sălaj and Mureș counties, through an infrastructure with over 4,000 km of water supply and networks with 137,000 connections and over 2,080 km of sewerage networks with 80,000 connections, 48 surface and underground water sources and 60 treatment plants.

Among the at least over 2,000 employees of the Company, a large part are graduates of Cluj Universities who carry on the tradition of 130 years of water supply in an institutionalized system and of close collaboration with the university environment.

The International Conference "Air-Water Environmental Components" is perhaps the best example of this close communion of interests and collaborations between the Company and the Cluj academic environment, for us being not only a point of pride for the support provided during each of the 13 previous editions but and a real interest due to the convergence of concerns and topics discussed with hydrological and hydro-meteorological factors that today influence or affect the provision of water supply and wastewater treatment.

Last but not least, the communion of concerns is also manifested by the shared interest in education. What is the purpose of the university itself, for the Company is a soul concern in the policy of Social Responsibility derived on the one hand from the desire to commemorate the tradition of all those who have worked in the last century to bring this vital good to the houses of fellow citizens which is THE WATER and on the other hand to contribute through water education to the awareness of future generations of adults about the dangers that threaten today this vital resource which is not infinite.

The educational program for children and young people on the protection of water sources and the environment in general, started as a pilot in 2003 using as a 'headquarters' the Water Museum, belonging to the Company, in turn established on

the occasion of another important anniversary, namely in 1992 at the centenary of the Cluj Water and Sewerage Plants.

Since then, our educational program has been perpetuated, hundreds of schools, even universities, thousands of kindergarten children, pupils and students already going through the programs, from open lessons, ecotourism of the geographical area from the catchment basin to the point of discharge of wastewater treatment in Someș, visits of important objectives of the Company such as Gilău Water Purification Station and Someșeni Wastewater Treatment Plant.

We are proud that in 2017, the Company became the co-founder and founding member of the Global Network of Water Museums - WAMU-NET - The Global Network of Water Museums, an international organization that today brings together over 71 water museums from five continents and is adopted and supported by two Resolutions of the Intergovernmental Council of the UNESCO International Hydrological Program.

The company is also represented in the core team of one of WWQA's four action platforms - the World Water Quality Alliance, an initiative supported by UNEP - the United Nations Environment Program and of prestigious governmental, educational and private entities are part of it, such as, the International Water Association (IWA), the World Bank, the European Environment Agency, Google, the World Health Organization, the US State Department, Universities, the World Water Council, the World Economic Forum, etc.

The Social Engagement Platform, in which the Company is represented, aims to work locally with municipalities around the world to raise awareness among various sectors of society about global water quality issues and achieve greater accountability of all segments of society for the protection of water resources.

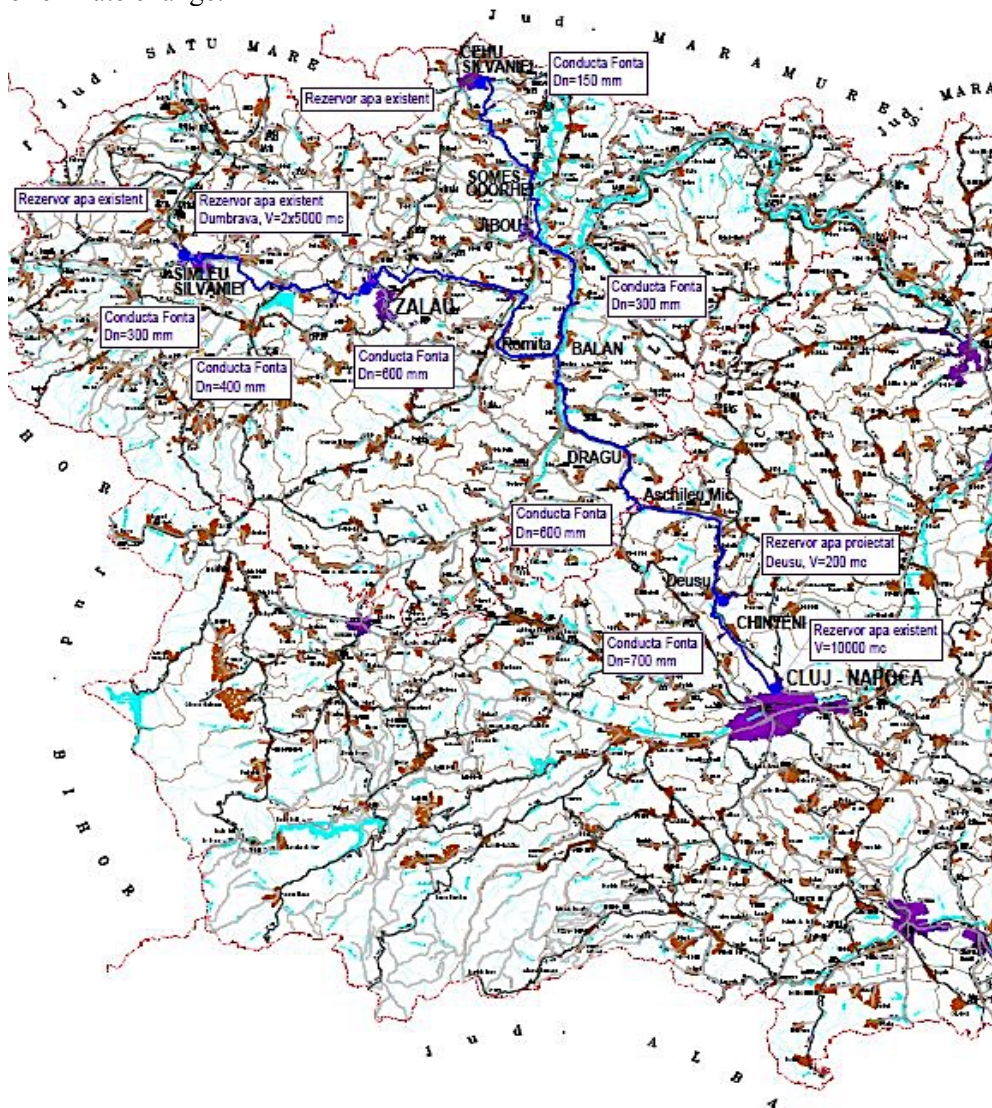
As an international initiative of this platform, more than 30 Local Water Forums have been created so far in various municipalities around the world, one of the most recent being the Cluj-Napoca Local Water Forum, in which, once again, intertwine the common concerns of the Someș Water Company SA with those of the University of Cluj, through the representatives of the Faculty of Environment and the Faculty of Geography.

Last but not least, the collaboration with Rotary Israel, through their RHAW program - Rotary Hands Across Water and Hi-Teach, an interesting way of incorporating practical principles that ensure the operation of old or modern equipment from the water sector, in making more interesting the scientific theories underlying those mechanisms.

In fact, the effects of climate change, which are part of the concerns of the Faculty of Geography and the Air-Water Conference. Components of the environment, are another example of topics in which academic education is intertwined with the practical experience of the Company.

In particular in recent years, the effects of climate change have begun to affect the administration and operation of public water supply and wastewater collection and treatment systems to the point that at the beginning of the major investment project currently underway by SOMEȘ Water Company under the Program

Operational Large Infrastructure - POIM, we contracted a study to identify measures to mitigate the negative influences on the water and wastewater system, as a result of climate change.



The proposed adduction Cluj – Sălaj

One of the most important recommendations of the study, which also coincides with the conclusion resulting from the practical experience of the operator, is the extension of the centralized water supply system at regional level, so as to eliminate the vulnerabilities suffered by localities still powered by local sources (wells, springs).

Either we are talking about the increasingly frequent and severe periods of heatwave associated with drought, or we are talking about major torrential rains whose number and intensity have increased significantly in recent years and which due to the increased rate of water infiltration, do not allow water infiltration leading to the enrichment / completion of the groundwater, whether we are talking about the pollution that these torrential falls can cause on local sources by washing animal manure and transporting them to the source area, or we are talking about severe negative temperatures that lead to freezing in the shallow water table, all these phenomena have been experienced in the operation of the systems managed by the Company in recent years and measures are needed to combat them and ensure the continuity and quality of service.

Correlated with these practical findings and the recommendations of the study, one of the most important works included in the major investment project POIM Cluj-Sălaj carried out by the Company, will be the realization of what will probably be the longest drinking water supply in Romania, an supply that will carry water from the source of Cluj, respectively from the Gilău Treatment Plant, in the entire Sălaj County. A main supply 164 km long, with another 150 km of secondary supply as its branches and which will greatly increase the central framework of the integrated regional system using a single source of raw water - the Tarnița mountain accumulation. With a volume of over 71 million cubic meters of good quality mountain water, the main source of raw water of the Company that today serves Cluj-Napoca, Gherla, Dej and over a hundred rural localities in Cluj and Mureș County, will be able to ensure in the near future also the centralized water supply of most of Sălaj County.

Moreover, this major investment that will help minimize the effects of climate change will benefit not only the localities where distribution networks are set up under the same investment program, but also localities that will set up such networks in the future.

The Company's environmental concerns are also evident in other areas of its business, from the production and use of green energy, to the reduction of the carbon footprint, to hi-tech construction technologies, rehabilitation and intervention in networks that reduce the impact on the environment.

Someș Water Company S.A. is one of the few utility companies in Romania and in the world that produces green energy from three major sources. It produces electricity through its own micro-hydropower plant located downstream of the dam of Lake Tarnita with an installed capacity of up to 10,000 MWh per year, delivering the energy produced in the National Energy System and trading the green certificates on the profile exchange. Within the major project POIM Cluj-Sălaj with development in the period 2019-2023, we will build another micro-hydropower plant within the Gilău water treatment plant, on the supply of raw water from Tarnița at the entrance to the Station. The energy supplied will be used for the operation of the water treatment plant, and will cover about 30% of its consumption.

We produce electricity and heat from biogas resulting from the fermentation of sewage sludge in sewage treatment plants in Cluj-Napoca, Zalău and Dej.

In fact, the reduction of the environmental impact of the sludge resulting from the wastewater treatment process will be the object of another work carried out within the POIM, namely the construction at the Someșeni Wastewater Treatment Plant of a facility for dehydration and drying of sludge with energy recovery. theirs. The sludge will be significantly reduced in terms of humidity and volume, the ash resulting from energy recovery can also be used for the production of floor tiles or other purposes. The company will thus use an ambitious way of recovering sludge on sustainable development through proper management of sludge on reduction (by drying), reuse (biosolid) and recycling (wet fraction). Sludge that has so far posed an environmental risk due to the ever-increasing amount of storage space is insufficient, thus significantly contributing to the objectives of the circular economy.

Last but not least, the Company extensively use solar panels to power data transmissions from infrastructure targets located in remote rural areas to the regional dispatcher. We also intend to expand the use of solar panels and other objectives of the Company, including at the company's headquarters.

In fact, practically all the major investments carried out by Compania de Apa Someș S.A. with the support of the Cluj County Council as the majority shareholder of the other local authorities in the area served and of the Someș-Tisa Intercommunity Development Association, starting mainly with 1997 and whose total value today exceeds 650 Million Euros, have contributed significantly to the protection environment and sustainable management of water resources.

The Company's institutional steps towards the same goal also aimed at environmental protection through initiatives such as the elaboration of the Tarnița - Gilău Pollution Prevention Plan (PPP) started in 2003 within the ISPA (Accession Preparation Instrument) investment program with the aim of co-opting all authorities, public and non-governmental institutions and entities, including the academic environment in a set of integrated and coherent measures for the protection of the entire geographical area that includes the catchment basin upstream of Cluj-Napoca.

The investments made with non-reimbursable funds from the European Union through the five major projects carried out so far have been supplemented since 2002 with smaller investments financed from the IID Fund (Maintenance, Replacement, Development) consisting of the royalty and profit tax transferred by Company mainly to the Cluj County Council and returned in this fund intended exclusively for investments to expand and rehabilitate the managed environmental infrastructure.

At the end of 2021, at the initiative of the president of the Cluj County Council, the Someș Water Company S.A. has started the preparation of an investment to ensure the supply of drinking water to the localities in the mountainous area of the county, respectively Călățele, Râșca, Mănăstireni, Beliș, Mărișel and Măguri Răcățiu.

In conclusion, the interdependence between the academic environment, not least the dedicated specializations of the Faculty of Geography and the 130-year practical activity of the Someș Water Company S.A. have been and will continue to be in the process of finding the best ways to put theoretical research at the service of practical

applications that on the one hand protect the environment and on the other hand ensure the sustainable development of communities and the achievement of objectives. The 2030 agenda of the United Nations, in particular SDG 6 - water and sanitation for all.

Ph.D. Engineer **Călin Vasile Neamțu**, General Manager
Sociologist **Victor-Lucian Croitoru**, Director of Communication

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