

water summit



BUILDING ON HUNGARIAN WATER TRADITIONS

SUCCESS SCORED BY PURECO AND BUDAPEST WATERWORKS AT THE BUDAPEST WATER SUMMIT EXPO

➤ The Water Innovation Award of the Budapest Water Summit 2016 Expo was presented by an international jury to the ReWater drinking water treatment container developed by the Hungarian firms Pureco and the Budapest Waterworks. "We have developed this product for the additional cleaning of biologically treated waste water to be able to produce potable water. However, it also provides us with further opportunities to produce drinking water from various kinds of surface waters.




We have made several tests and we need to try different kinds of technological processes to make it as versatile and stable as possible," Pureco Managing Director **Bálint Horváth** explains to Diplomacy&Trade.

He adds that "this exhibition was a very pleasant surprise for us. There were more than 2,000 professional participants registered for the Summit and a lot of them visited the Expo and our stand, as well, many showing great interest in our ReWater water treatment product (see BOX). We had the opportunity to show the container to important decision-makers, politicians (such as the President of Mauritius) and leading officials of various organizations and even welcome these people to taste this cleaned water. ReWater was tasted and tested by representatives of the five continents and the five major world religions." Pureco Ltd. was established by Károly Kovács

in 2006. Bálint Horváth joined it as a minority owner two years later. The aim was to set up a Hungarian company involved in the water industry. "At that time, there were a lot of foreign companies present in this field in Hungary, employing Hungarian professionals. We thought that these engineers and other experts could also utilize their knowledge within a Hungarian company and be successful in Hungary. Hungarian water industry knowledge has its traditions and we wanted to turn these into a successful business. In order to expand outside Hungary, we set up partner companies in the neighboring countries (first in Slovakia in 2008; then in the Czech Republic in 2010 and in Romania in 2011). As a result, we can now talk about a group of firms employing around one hundred people altogether," the General Manager points out. Basically, Pureco has two main activities. The commercial part involves the sale of products and related services in terms of stormwater treatment, drainage and infiltration and waste water related systems such as biofilters and pumping stations, while the entrepreneurial part includes the design and implementation of technologies in areas like municipal wastewater, industrial waste water (from meat processing to the pharmaceutical industry) or potable water. Clients include local governments, communal water service providers and operators, designers and implementers. According to Bálint Horváth, "perhaps, our nicest and most complex project was building out the rainwater drainage system (including the treatment of rainwater) at the Liszt

Ferenc Airport here in Budapest in 2011. The task was to efficiently drain rainwater from the runways. For this process, we applied products we had developed and patented. Another major project was in Nyíregyháza, NE Hungary, where we did the rainwater drainage and storage system (including the treatment of rainwater and dewatering) in the first phase of the Lego factory, the biggest one in Europe. We provided a complete solution with designer background support." In Hungary, Pureco built over twenty (communal and industrial) waste water treatment plants all over the country. As an example for a successful Pureco project abroad, Bálint Horváth mentions their participation in the implementation of a drinking water treatment plant (and a distribution network of 200 kilometers) that provides 100,000 people with potable water in Quang Binh province in Vietnam. The three-year project was financed through an aid loan from the Hungarian government and was completed in 2016. As for the CSR activities of the company, the Managing Director mentions that "we primarily support sports and recreation for children. It is important for us that kids get the idea of a healthy lifestyle at an early age. We also supported – in cooperation with the General Directorate of Water Management – drawing competitions on the occasion of World Water Day. In 2013, we were on the dikes of the Danube at Szentendre, north of Budapest to help pack sandbags during the great flood." The company's name is coined from the

words 'Pure' and 'Eco'. As Bálint Horváth explains, "it is very important to note that while we treat water and it becomes clean, the projects are also economically viable, sustainable and cost effective. Although, these terms may be hackneyed expressions, we take them very seriously. We always indicate what the amount to be invested is and – what many people tend to forget about in the initial phase – what the expected lifespan is and how much the operation will cost during that lifespan. What we can often see is that the quality of the given system is pushed to the background just because better quality costs a bit more and the client does not consider that the operational costs will be lower (and the total cost will be more favorable) when taking into account the whole life cycle. We began to manufacture a lot of quality products and we are also in contact with a lot of quality producers in Eastern and Western Europe. We put emphasis on products whose simpler operation makes it possible for us to provide sustainable services and solutions. We are aware that achieving this is harder and it takes much more time to explain the benefits, still, we believe in this as sooner or later, everyone realizes that this is what the future is about." 



Pureco Introduction



REWATER

➤ According to Pureco founder and owner Károly Kovács, "the water coming out of the ReWater container is cleaner than any underground or surface water you can find. As a result, it is possible to be let directly into the drinking water supply pipe system."

The ReWater system was exhibited at the Budapest Water Summit in November 2016. "It was there that the water produced by the system – from waste water biologically treated at the cleaning site of the Budapest Waterworks – and with quality very much surpassing the international standards for drinking water, was bottled and offered as ReWater artificial mineral water to our guests, international dignitaries attending the Summit," he adds. According to Károly Kovács, it has been proven that the equipment is cost-effective regarding the expenses of investment and operation, as well, in producing sufficiently treated or even potable water. The ReWater container can be deployed in a standard way within a range of water pollution but it can also be shipped tailor-made according to the quality of water going into the system and regarding the required quality of the water to be produced. Even viruses and bacteria are filtered out in the course of the treatment process and so are the minerals that have to be put back at the end. Should there be a power station at the village, town or city with a demand for cooling water, this system can produce the proper quality water and there is no need to use for this purpose desalinated water produced with a lot of energy.

Regarding international interest for the product, Károly Kovács says the views and opinions of people visiting the ReWater container at the Budapest Water Summit are processed and communication with them is continuous. There has been interest from Arabic countries, Africa, Central Asia, based on which serious talks are under way. Some of these talks concern the preparation for the management of possible disasters in the future. International aid organizations came up with the idea that they might keep stock of this equipment in various parts of the world from where a ReWater container – or more, if necessary – could immediately be shipped to the area struck by earthquake, fire, tsunami or other disaster. The most crucial necessity in situations like that is the availability of healthy, potable water. It might well be that the water base, supply chain, the pipe network are compromised and ReWater could be the solution to produce drinking water from contaminated sources. He finds it important to note that the amount of electricity required for the operation of the system is a fraction of what you need for the desalination process. Energy for the operation can come from any sources available, including solar panels and can be controlled remotely even via satellite. "In its current setting, the ReWater container is able to produce 180,000 liters of potable water a day and if you take the amount of water said to be necessary for one person a day (that is, 2-3 liters), that would be sufficient for supplying over 70,000 people with this single container," Károly Kovács points out.