

## Your partner in Small Hydro

A Voith and Siemens Company

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Name: Radu Cârja

**Job Title:** Head of Small Hydro Division

Personal Motto: "We cannot direct the wind, but

we can adjust the sails!"

The Division Small Hydro of Voith Hydro GmbH & Co KG, located in St. Georgen, is an independent operating unit and the



technological competence center for small hydropower within the Voith Group. The company combines all core competencies from the turbine design to the entire E&M equipment, design and manufacturing to after-market service under one roof – and underpins all this with more than 90 years of experience in the field.

Since February 1, 2020, Dipl.-Ing. Radu Cârja has taken over the management of the business unit Small Hydro in St. Georgen. Mr. Cârja started working for Voith in 2007 as a construction site engineer. In 2014 he took over as CEO at Voith Hydro Bucharest. He is therefore very familiar with both the company and the small hydropower market and its customers.

## **Interview:**

What drives you personally and Voith Hydro GmbH & Co KG's Division Small Hydro as an energy company?

I started my career in Voith as a site installation engineer and was later given the chance to take on different responsibilities in project and organizational management. Since my beginnings at Voith Hydro, I was part of a well-functioning team, learning and doing new things every day as we are always looking for creative improvement solutions for our clients and organization. Seeing a project through to its end, overcoming all challenges together with our colleagues and partners, and meeting our deadlines and goals remain for me the most powerful personal drive.

Our products and services are developed for the people who use them. We understand our customers, we are committed to innovation and always strive to offer the most effective solution. Creating value for our customers' businesses and seeing them grow drives us in the Small Hydro Division.

What products and services does Voith Hydro GmbH & Co KG's Division Small Hydro provide?

As a Small Hydro water to wire supplier, we offer our customers everything from one single source. Our range of products and services includes:

- Standardized hydropower plant concepts up to individual solutions, eco-compliant
- Economical, constructive solutions with high operating safety
- Integrated designs with optimized interfaces
- Solutions that keep construction costs at the lowest possible level
- Concepts with high efficiencies and performance guarantees, with maximum reliability
- Competent commissioning of all systems, training of operating and service personnel

Many of our customers are benefiting also from our Small Hydro HyService offering, which covers the full service of daily operation, periodic maintenance and spare parts management.

Services for older plants are included in our portfolio; the performance and efficiency analysis from Voith will point out existing potential improvement possibilities that can be implemented going up to general overhauls of the plants.

In addition to Austria, Voith Hydro GmbH & Co KG's Division Small Hydro is also active worldwide and is particularly engaged in Eastern Europe. How is business there?

The region was and remains a focus for our Small Hydro Division. Letting aside the impact of COVID-19 pandemic, , we can say that the Eastern Europe states were on the right path in recent years with investments in small hydropower plants and therefore increased the share of renewables in the energy mix.

Nevertheless, the small hydropower sector requires a coherent strategy and the availability of public subsidies in the form of feed-in tariffs and fixed prices for long-term contracts.

As a mid-term scenario considering the large hydropower potential and the growing energy demand, we expect to see the market developing following the successful example and models of Central and Western European small hydro markets.

Which Central and Eastern European markets are particularly interesting for your company? In your opinion, are there any peculiarities to pay special attention to when doing business in these countries?

Customer proximity is our strength in the region. As Voith Hydro, we have had a market presence for many years through our offices in Montenegro, Slovenia and Romania, which allows us to act more effectively and efficiently. In addition, our Small Hydro Division from St. Georgen supports the local operating units through its dedicated sales team for Eastern Europe.

For the next year, we are closely following developments in Serbia, Montenegro, Bosnia and Albania. However, we see challenges when it comes to financing and approvals for project execution.

Considering our long experience in the region, we are able to support our customers to plan and guide them through the execution of entire projects, including offering alternative financing solutions.

Can you tell us about the flagship energy projects your company has implemented in CEE countries?

Our installed fleet in CEE consists more than 80 projects installed and commissioned in recent years, from single unit power plants to small hydro cascades of more than 10 units, covering the entire range of machine types – Francis, Pelton, Kaplan.

We are particularly proud to have supported the realization of the Bosnian flagship project Zlate, built just outside of the town of Jablanica. With an installed capacity of 4.8 MW, the plant will produce approximately 18.4 Gwh of green energy in an average year. The two delivered Francis units were custom designed to fit the customer requirements. The hydraulic design of the prototype runners is based on a tried and tested model from Voith Hydro Research Center Brunnenmühle in Heidenheim, Germany.

What do you want everybody to know about Voith Hydro GmbH & Co KG's Division Small Hydro?

As the Small Hydro Competence Center within Voith Hydro Group, we have taken the responsibility of designing, manufacturing, installing and commissioning the most efficient machines for our customers. Innovation is in our DNA, as we are constantly developing and being able to convince our customers worldwide with new attractive solutions.

We've recently extended and developed our StreamDiver product family, and we are looking forward to promoting it soon to all our small hydro customers. Our developing plans are continuing even further in the area of small hydro reversible pump units, hybrid concepts and many more.

We continue to grow also in the area of Small Hydro HyService. We've remained the same lean and fast-reacting organization, with access to a wide and fairly distributed network of Voith Hydro experts willing to support you 24/7.

For more information regarding our product portfolio and reference projects, we invite you to access our dedicated Small Hydro website at <a href="http://www.voith.com/vhge">http://www.voith.com/vhge</a>

