THERE AND BACK AGAIN

SUCCESSFUL IN AFRICA AND READY TO CONQUER EUROPE



Image 1: Svilen Voychev (CEO of Valsa Sustainability Solutions) and Jost Kraaijeveld (Valsa Business Unit Western Europe) at the "Solar & Storage" trade fair in London

ntje Klauß-Vorreiter and Vivian A Blümel, two Germans who have been active in Africa for years, have been observing how the solar industry in South Africa is growing for a long time. They conducted interviews with Kaloyan Dimov and Svilen Voychev, two Europeans who started small in South Africa, built up their companies into solid medium-sized companies and are now planning to conquer the European market as well. Dimov is the founder and CEO of lithium battery manufacturer Solar MD and Voychev is the founder and CEO of system provider and substructure manufacturer Valsa Sustainability Solutions. Why are they now also working in Europe and what experiences from Africa can they draw on?

Why South Africa?

In a crazy coincidence, Dimov and Voychev are both from the city of Ruse in northern Bulgaria! However, they only met in South Africa. Voychev has been in South Africa for 20 years. He wanted to go out into the world after studying business administration and in 2004 the opportunities for Bulgarians were still limited. South Africa offered Voychev the freedom to try things out and set up his own business.

"The bureaucracy in Europe is very high – setting up a company in another European country is not easy — but in South Africa what counts most is what you can do. As an entrepreneur, you are much freer to realise your ideas," Voychev cites as an important reason for founding his company in South Africa. Of course, the country, the weather and the people are also important reasons why he chose South Africa.

Voychev has entrepreneurialism in his blood. He started as a building contractor. He gained his first experience in the field of Renewable Energies with the installation of heat pumps, but since 2009 his company Valsa has focused on photovoltaics (PV). "At the time, the market was just emerging and we had to do everything, planning, purchasing, construction, which meant we could also learn a lot. In 2012, we built what was then the largest rooftop system with Mustek, 200 kWp. We learned that the heavy rails of the European substructure manufacturers do not always match the lightweight roofs in South Africa, so after the project we started to develop rails and clamps designed for local applications and set up our own production," he describes.

After studying at the University of Applied Sciences in Koblenz, Dimov worked at the German company Juwi as a project manager for PV power plants. In 2010, Juwi began operating in South Africa, and Dimov was one of the project managers involved in the construction of South Africa's first solar power plant. The 7 MWp power plant "Rustmo 1" was built in 2013 as part of the first round of the Renewable Independent Power Producer Programme (REIPPPP). With this ongoing tender procedure, the South African Government is pursuing the goal of involving the private sector in the expansion of renewable energies in electricity generation. REIPPPP is intended to relieve the financial burden on the state-owned energy supplier and grid operator Eskom, which mainly operates coal-fired power plants and has repeatedly carried out large-scale controlled power shutdowns since 2007 [1].

"When you're involved in the construction of these large solar farms, the question quickly arises: 'What do we do with all the solar energy we produce and how can we use it even when the sun isn't shining?'," says Dimov. During one project in 2010, he came into contact with lithium storage technology for the first time and was fascinated by it.

As a result, in 2014, when the industry was still relying almost exclusively on lead-acid batteries, he founded the company Solar MD together with a group of other engineers to produce lithium batteries themselves. He was well ahead of his time, he explains: "Lithium was difficult to sell at first; you had to explain to the customer why the batteries were smaller yet more expensive than lead acid. Customers couldn't imagine that this energy storage system was better, even though it was so much smaller."

A different motivation

In South Africa, storage systems are mainly installed to ensure a continuous power supply. Conventional energy production is subject to the monopolist Eskom, which is accused of corruption and mismanagement. The power supply is unreliable because the coal-fired power plants are dilapidated. As a result, both scheduled and unscheduled load shedding are the order of the day. The situation gets worse every year: there are power outages almost every day, and in some cases entire districts have to go without electricity for several days [1]. This led to a boom in the solar industry. At the end of 2023, South Africa was number 1 in installed PV capacity in Africa, with 7.8 GWp. This corresponds to about 0.5% of the total capacity [2].

Found success in Africa and now off to Europe

There is still a lot to do in terms of energy transition in South Africa. Nevertheless, the entrepreneurs Voychev and Dimov are expanding into Europe. How can they benefit from their many years of experience in Africa?

Valsa is also expanding into the US and UK markets, as they are established and have a high purchasing power. Voychev's company currently has branches in Bulgaria, Switzerland and the Netherlands. Together with Jos Kraaijeveld, who is responsible for Valsa's business development in Western Europe, Voychev visited



Image 2: Kaloyan Dimov (CEO of Solar MD) on the construction site of his factory in Cape Town

the London "Solar & Storage" trade fair in April. Later that same month, Valsa was also an exhibitor in the USA at the trade fair of the same name. In London, Valsa signed a contract with inverter manufacturer Sunsynk, his future distributor for the UK and Spain. Voychev's general strategy is to get to know new markets through small projects. In Namibia, for example, his market knowledge started with an appraisal for the construction of a PV rooftop system for the Bank of Namibia. Voychev's team was able to learn a lot about the current situation in the PV market and get to know the standards and laws. This was followed by installation projects and product sales through a sales partner. Valsa currently manufactures exclusively in South Africa and delivers from there to the world. In the medium term, Voychev would like to set up production in Turkey or Bulgaria, although he currently assumes that the labour-intensive smaller components will be produced in South Africa in the long

Image 3: First 14.3 kWh Solar MD storage installation in Germany

term and that only the large rails will also be manufactured at other locations. Of course, the products must be adapted to the respective markets and certified. Valsa has already completed designs for the USA and Europe, which will be submitted in the next few months. "The market decides where and when," says the CEO.

Solar MD has just completed a new production facility in South Africa with a capacity of 3GWh and will take occupation in the next few days. "Africa has a significantly greater demand for solar power than Europe," says Dimov "The energy transition in Europe is much further along than in Africa and storage systems are becoming increasingly important." This is why he has decided to expand in the direction of Europe and also opened a 60MWh plant in his hometown of Ruse in 2023. "South Africa is ahead of Europe in many ways when it comes to storage technology and energy management," declares Dimov. Solar MD has its own software platform MYPOWER24 and also developed the Solar MD Logger V2. The logger is a communication interface for monitoring and controlling PV systems with Solar MD energy storage products. It is specially designed to connect multiple energy devices, and can provide records, data and events from third-party devices such as inverters, energy meters, weather stations and other energy devices.

Benefit from experience

In South Africa the focus is on ensuring that users have a continuous supply of electricity, even during power outages, but in Europe it is about optimising the electricity price for the end customer and self-consumption. To meet the needs of the European markets, Solar MD has made some software adjustments. "Every country has different electricity prices, which can change throughout the course of the

day in some cases, and our software is built to navigate these fluctuating tariffs. In general, the requirements in Europe are not nearly as complex as in South Africa," says Dimov. And whether he is right, Arek Lis, PV installer from North Rhine-Westphalia, will soon be able to determine. With his company Now3 Solar Solution, he has installed the first 14.3 kWh Solar MD battery. It was manufactured in Ruse and purchased directly from Solar MD. To ensure that installers in Germany can also buy the solar MD batteries in Germany, Dimov is currently negotiating with various wholesalers about the inclusion of his products in their portfolio.

Both entrepreneurs believe that the experience they have gained in Africa is the best basis for market development in Europe. "What works in Africa works everywhere," explains Dimov. While Voychev adds: "If you can realise a project in Africa, you can do it anywhere."

Both entrepreneurs will be on site as visitors to Intersolar this year. Solar MD will be represented by Alexander Joist, a former IBC employee, and Valsa CEO Voychev, will be at the show together with Jos Kraaijeveld, Sales Western Europe.

Sources

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