Playing a role in the solar revolution

PES was fascinated to hear from Piotr Markowski, Chief Executive Officer at Corab, about the company's transition from satellite dish production to PV systems. How is it putting its expertise in the manufacture of steel and aluminium products to good use and what are the similarities in terms of quality, safety and now, market demand as well?

PES: It's lovely to welcome you to PES Piotr. It would be great to begin with a brief introduction to Corab for readers who may not be familiar with your name.

Piotr Markowski: It's great to be here. Corab is a leading European company producing photovoltaic systems. We have been present in the photovoltaic market for over a decade now. We began locally in Poland, and are now present across Europe. Annually we deliver roughly 1.5 GW in PV systems.

PES: You've been producing steel and aluminium products for many years, but began with work in the satellite industry, is that right?

PM: Yes, indeed. We initially manufactured satellite dishes and then gradually expanded our area of expertise into steel and aluminium products used in renewable energy, although satellite dishes are still part of our portfolio. We exported our dishes to 45 countries and even now, 30 years on, they are still visible and working well on rooftops all over the world. This shows the great deal of care we put into the quality of our products.

PES: How did the cross over to photovoltaic systems and renewable energy come about?

PM: Our founders have always been interested in renewable energy, seeing it as a future-oriented growth area. Thanks to a widespread network of contacts, and by looking at international trends, the decision was made to invest in manufacturing photovoltaic systems and to work with companies involved in renewable energy sources. As time has shown, the decision was right. It was not only a business choice, but a conscious one driven by the concern about the planet and future generations.

Piotr Markowski

PES: How is business at what is a time of growth for the industry?

PM: Energetic transformation works and takes place in the sphere of consciousness. For several years now we have seen an increased interest in obtaining electricity from renewable sources. Financial aid programs offered in support of the photovoltaic industry by the Polish government have helped to develop the branch tremendously. Grants and incentives have significantly contributed to the unbelievable growth of this sector.

In Poland we started to see a particular trend for solar electric energy and it is hard to imagine a newly built building without a PV installation. This growth in interest has translated to placed

orders, from individual clients with family homes, to businesses, photovoltaic farms, and agriculture businesses.

PES: What changes have you seen in the industry over the past few years? Are solar farms getting bigger in size?

PM: Yes, farms all over Europe, including Poland, and solar parks are becoming a natural part of the landscape. Let the numbers speak for themselves. In January 2022 installed capacity of renewable energy sources in Poland was above 17.4 GW. Compared to January 2021, there was an increase of as much as 37%. We will exceed 10 GW this year in the photovoltaic alone. For a country which until has been dominated by the use of fossil fuel, it's a hands down revolution.

We are pleased that Corab is playing a part in the energy transformation. A vast majority of photovoltaic farms built in Poland are based on the systems produced by our company. This is perhaps not surprising, as over the years we have been improving steel and aluminium production, we partner with the world's top suppliers, and have our own R&D department which cooperates with leading scientific centres.

This all means we are able to provide our clients with products that are long-lasting, well-made, and are a great fit in the variety of farms. In fact, we are not limited to

Poland, exporting our products to 20 countries, where they have a good reputation. We partner with Arcelor Mittal to give our products its Magnelis anti-corrosion coating. This means the products are long-lasting and the long-term warranty includes both the above-ground construction elements and those placed beneath the ground.

PES: What challenges do these changes bring and how can Corab help address them?

PM: The global energy transformation is accelerating and China, the biggest PV component manufacturer, is gradually moving towards solar energy. Without a doubt it will be a great challenge to ensure the uninterrupted flow of raw materials and components to producers, distributors and assembly companies.

There is no doubt that previously known and tested supply chains will need to be profoundly adjusted to the current reality. I think that customers will be paying even more attention to the quality of products and the assembly time when it comes to photovoltaic systems. I must admit that there is an opportunity for us to grow rapidly. As Europe slowly turns its back on fossil fuel and from year to year, EU member countries must meet the relevant standards regarding pollutant emission, regulated by specific legislation and acts. Europe is focused on production in its member countries, and our local content basically covers 100% of the production.

PES: Durability and corrosion resistance are of particular importance for solar farms, aren't they?

PM: We are aware of the potential that lies within photovoltaic farms. That's why we have developed freestanding construction lines, which prove themselves in multiscale investments. They apply to traditional systems directed south, but also east-west or tracker systems.

PES: Are you seeing an increased demand for higher output? How can a photovoltaic tracker help meet this?

PM: A photovoltaic tracker is an advanced device, which helps to significantly increase energy yield from the PV installation. Research conducted by the Polish Academy of Sciences shows that using the tracker facilitates an increase in the energy yield of up to 30% compared with using traditional photovoltaic solutions.

CORAB TRACKER WS T-001 system can track solar radiation through optimal positioning of the modules. The system is entirely automated and maintenance-free. It is characterised by clampless installation, with the possibility of using any desired PV modules and has an advanced sensor unit for weather monitoring. All this gains the maximum yield from the installation. We have created an advanced system which stands out due to its small number of components.

PES: It would be great to hear about one or two real-life examples of Corab products being put to use if you have any?

PM: We are seeing a high demand for PV constructions applicable in the AGRO business. We have designed the SLIDE-IN solution, a method for securing modules without using screws and tools, which ensures quick and easy assembly and reduces investment cost. Assembly of the module takes 30 seconds, and both securing and grounding can be done in one step. The cost of assembly is reduced by 30%, so it is appreciated by installers, and even more by investors.

PES: So although you're headquartered in Poland and your work is global, is that right?

PM: Yes. Our headquarters and logistics hub are in Olsztyn, in a well-connected spot, next to the city ring road. Our products are manufactured in Bartoszyce and the factory is one of the most modern of its kind in Europe. Our products are used in 20 countries and we regularly participate in trade fairs all over the world, including Intersolar in Munich.

We also value education, both in terms of increasing staff competence and spreading knowledge across the market and sharing our expertise with installers. We value innovativeness and full transparency.

PES: What do you think the next big thing in photovoltaic technology will be?

PM: Emphasis will be placed on product availability and quality. Customers will value a European warranty and efficient service. No less important is the safety of use and resistance to extreme weather conditions. We have reasons to be proud; our constructions undergo rigorous tests and are ideal for difficult conditions. We are certified by the European entities and we cooperate with universities and module manufacturers. All this to maximise the safety of use.

Correctly assembled constructions are resilient to powerful windstorms, for example. And regardless of whether our system is dedicated to roofs or constitutes a free-standing construction, it is always designed with the same amount of meticulousness and accuracy.

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