

Batteries International spoke to Robby Bourlas, chief executive of Systems Sunlight, about the firm's expansion plans into the US, its strategy in advancing its lithium product line and how the firm has coped with the devastating fire that ravaged the firm's operations in 2018.

The new world beckons

Global reach. It's more than fanciful business slang. It's now the key concept for any industry wanting to succeed in business internationally.

So when European battery maker Systems Sunlight announced in December that it was planning to launch

a subsidiary in North America and build a huge assembly plant, market reaction was swift. "It's a huge move," said one US battery machine manufacturer at the time.

"This is Sunlight making a bid to be a player at the top table."

Another commentator remarked that the investment was a substantial one given that only one battery firm — Concorde Battery — had set up a major production unit in the US for more than a decade.

The decision on when and how to open up a full battery operation was a huge step for Sunlight, according to Robby Bourlas, its chief executive. "But it was also a logical one," he says.

"We had been supplying industrial battery customers in the US for the past six years and we were aware that this was a market we could expand into.

"The choice of North Carolina was also a logical one. The location was close to many of our customers — the state has the fifth largest manufacturing economy in the country and an excellent transp infrastructure — so as a hub it would provide some of the best possible delivery times to customers.

"It also had a skilled labour force and management that were relatively knowledgeable about the battery business."

A more radical part of the proposal is that the new plant would make lithium batteries as well as lead ones — the traditional mainstay of Sunlight's battery business.

In this, Sunlight would be entering into a still emerging market in the US — all the mainstream lead battery manufacturers such as Exide, East Penn, Clarios and EnerSys have quietly been adding lithium to their battery offerings.



"Basically we're looking for a consumer friendly and customizable BMS. We've also spent much R&D time and money looking at all our lithium assembly and manufacturing processes" — Robby Bourlas



Main production facility Northern Greece

FIRE AND THE FIGHT BACK

One of the critical moments for Sunlight in recent years was a fire that raged through the firm's factory in Xanthi in northern Greece in May 2018, causing all production to cease.

What could have been a tragedy for the livelihood of the workforce was averted by speedy action, says Bourlas.

"The very same day of the fire we held an emergency board meeting and decided that we would retain the jobs of every one of our 800 staff, in effect we sent them home with full pay for an entire year until we could get the factory up and running again," he says.

"In a strange way the fire brought out two very positive things for Sunlight. The first was that we have now an extraordinary work force, committed to what we are doing, and very high productivity and efficiency levels. As a legacy, we also have some of the lowest turnover of staff in the battery industry."

Another benefit came from the €66 million (\$73 million) insurance pay-out — a record in the country — was the ability to re-equip the plant with state-of-the-art manufacturing equipment.

Given that many battery plants are frequently using machinery that could well be 20 years old, the result has been a more automated manufacturing line, greater productivity and, hence a more competitive product.

The plant at Xanthi returned to full production in the summer of 2019. In October, Sunlight announced it would create 200 new jobs, which

it reckoned would bring it to a level of producing 2.8 million cells a year. The previous December, Sunlight had announced plans to almost double its production of lead-acid batteries at its plant in Xanthi, Greece to 3.5 million cells a year.

When this happens it would make it the largest lead battery plant in Europe.

Plans for the expansion were enabled following a €12.5 million (\$13.9 million) loan from the European Investment Bank. The loan is the first support for industrial investment in a new EIB lending initiative backed by the European Fund for Strategic Investments, which aims to mobilize at least €500 billion by 2020.

Part of the expected success of the new US plant, says Bourlas, will also be predicated on the fact that the equipment being installed in North Carolina will also be some of the most technologically advanced



"The very same day of the fire we held an emergency board meeting and decided that we would retain the jobs of every one of our 800 staff, in effect we sent them home with full pay for an entire year until we could get the factory up and running again."



Production of the negative plate inside the plant

The move into lithium has been a long time coming. Bourlas says that Sunlight first started looking into lithium 12 years ago and that it now had one of the most advanced R&D units in Europe.

Under changes made recently to EU rules — which allow so-called 'Important Projects of Common European Interest (IPCEI)' to be funded disproportionately by domestic governments — Greece is investing heavily in Sunlight's new R&D outfit, which will be based in Athens.

Bourlas says a lot of recent research has been centred around battery management systems that optimize performance of the lithium cells. "Different ways of working require different battery management systems to get the most out of the cells.

"So for example, a forklift truck could be used in a variety of different ways — one might require fast-charging at lunchtime, another might be working three shifts, another yet another work pattern — and in each instance the software in the BMS needs to be configured to get the maximum from the battery.

"Basically we're looking for a consumer friendly and customizable BMS. We've also spent much R&D time and money looking at all our lithium assembly and manufacturing processes."

The first fruit of Sunlight's investment was the launch of its Li.ON Force product line of its so-called 'smart lithium batteries' for electrical industrial vehicles in April 2019.

"This new, revolutionary series of smart batteries represents a global innovation and combines the advantages of batteries featuring lithium technology with innovative applications of Industry 4.0 technology, which pertain to the use of Internet of Things technologies in industry," the firm said at the time of its launch.

"Here we provide Glocal, the global technological innovation offering

Part of our growth plans includes looking at other firms that could fit in well with what we're doing already ... We're not thinking of an acquisition of huge size — but a smaller, perhaps more specialized firm.

real time and two-way communication via the Cloud.

The Li.ON Force product range will be assembled in the new US plant as well as the firm's factory in Verona, Italy and Xanthi, Greece.

Sunlight's plans in the US don't come cheap. The official subsidiary, known as Sunlight Batteries USA, will require an investment of some \$10 million in the next three years. The local state government is supporting the move with a \$400,000 grant.

Of this \$6.5 million will initially be used for equipment and infrastructure and the creation of a new assembly hub with a total area of 9,700m².

This would make it larger than Sunlight's plant in Verona, which serves the European market. The firm anticipates a production capacity of traction batteries of some 200,000 cells per year.

An official statement from the firm says: "Our investment... is a starting point to support our organic growth but we are also evaluating other strategic investment opportunities."

For this read acquisitions. Or potential ones. Bourlas is open about this. "Part of our growth plans includes looking at other firms that could fit in well with what we're doing already, almost certainly those looking at lithium and probably with lead as well," he says. "We're not thinking of an acquisition of huge size — but a smaller, perhaps more specialized firm.

"We're also not confined by geographic region — we're also looking across Europe too." Bourlas says the company's focus would be on Germany, France, Italy and Spain — countries where Sunlight has already a growing market presence.

Bourlas is optimistic about the new plant's success for a variety of reasons. One of them is simply technical.

In the US, assembly of cells for industrial batteries is typically through a welding process. The fault with this process is that when batteries are subject to continued vibration the welds can fail and rewelding is time consuming and more expensive. In Europe flexible bolted connectors typically are used and when these fail their replacement is technically more straightforward. ■

The first fruit of Sunlight's investment was the launch of its Li.ON Force product line of its so-called 'smart lithium batteries' for electrical industrial vehicles in April 2019.

MANAGEMENT RESHUFFLES

One aspect of Sunlight that is attracting speculation is the question of management succession. Within a couple of weeks of the announcement of the new US plant, Greek multinational group Olympia — the owner of Sunlight — made sweeping changes to the management of its battery subsidiary.

Vasilis Billis, chief executive of Sunlight for six and half years, stepped down and was replaced by Bourlas, Olympia Group CEO and already a member of the Sunlight board. Billis remains on the board of Olympia subsidiary company Play, a mobile phone firm.

Bourlas will remain in charge of Sunlight until a successor is found. "We have an international executive search for a suitable replacement going on as we speak."

The likely appointee will almost certainly have a lead and lithium background.

Other changes included the appointment of Foad Derisavi to the management team to take on the production and development of lithium products and advanced technologies. His brief is to help Sunlight to expand lithium batteries for industrial use into international markets.

Also taking on more of a role in the lithium battery sphere is the existing head of the recycling division, Spiros Kopolas, who assumes the duties of business development for lithium battery applications, "aiming to further expand the prospects of Sunlight via partnerships on a global scale," the company says. Vassilis Gavroglou has also joined the management team as director of human resources.

Reassigning the management positions is only part of the company's moves to reposition itself for the future. Another initiative is looking at the digitalization of its business operations. The company says this especially includes "the introduction of Industry 4.0 technologies in productive operations and supply chain. These will be the key factors for business continuity and success in the very near future."

"At the same time the company proceeds with its structural changes concerning its organization, as well as the organization of its production with the objective to focus on its strategic priority relating to the ever-growing technologies of lithium batteries, targeting a leading position on the global scale," said the firm at the time.



The decision on when and how to open up a full battery operation in North Carolina was a huge step for Sunlight but it was also a logical one.