

Strategies that make a difference for photovoltaic panel manufacturers

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Summary

Strategy elements to differentiate an offer for PV panel makers.

Keywords: strategy, differentiation, photovoltaic, technology, deeptech, business, technology.

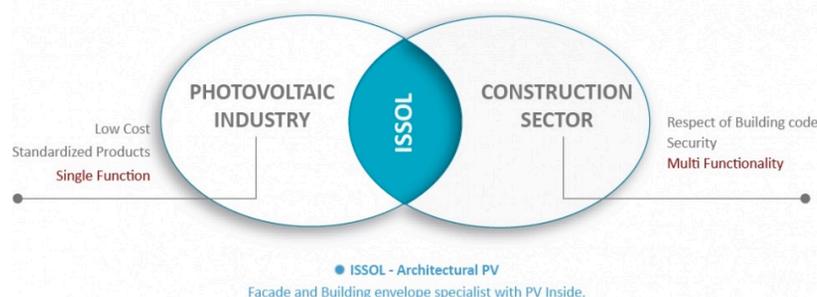
Photovoltaic panels market has become mostly a commodity market. Panels are sold at given price per Watt-peak while performances are following industry standards at standard test conditions. Very few features help to sell above the market price and at best they allow a small price premium and worst case, they allow makers to maintain their market share.

Still, some companies found a way to survive with a differentiation strategy. Even though it hasn't allowed yet to create a significant market in terms of size, it has allowed to create profitable market niches. As examples, we can mention the flexible panels market niche, the BIPV market niche, etc.

But, differentiation is not an easy thing. Too many approaches add fancy features (usually technical) that don't add much value to the product. I remember hearing product selling pitches like "we have 5 bus bars whereas industry is at 3!". This isn't what makes a (huge) difference and we can confirm it when we look back at it few years later.

A differentiation strategy is viable only if the gap is significant and recognized by buyers and the end market

One good strategy is to "go downstream" on the value chain. It consists in adding to your product elements that are usually added by the customers and thereby also facilitating a wider adoption (for those who don't know how to do it). A good example is the company [Issol](#) in Belgium with its "architectural PV" approach as illustrated below:



In few words, they are providing PV as building element instead of "just" providing a PV panel. They add the mechanical parts and qualify it according to construction sector standards.

Then, we have actors that placed their bets on **technological breakthroughs**. It's usually the outcome of **years** of Research & Development and long, patient investment strategy.

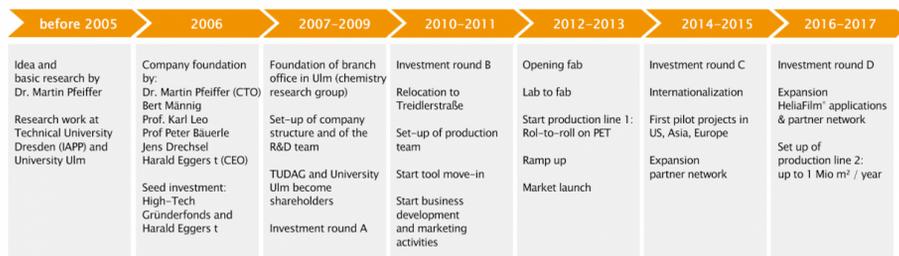
**These actors are called today "Deep Techs"
to highlight the huge amount of work and sweat
behind the innovation**

I'd like to highlight 2 Photovoltaic Deep Tech start-ups in particular.

The first one is [Heliatek](#) that decided to tackle the 3rd generation of photovoltaic panel with OPV (Organic Photovoltaic). It was created back in 2006 as a spin-off of TU of Dresden and University of Ulm.

So, they have been over 10 years in the domain, pushing this new technology to the market with heavy R&D investment. But, they also partnered with key actors of the building industry over different materials: [AGC Glass](#), [Zambelli](#) (metal), etc.

Second, they made a big step forward end of 2016 when they successfully raised 80M€ for increasing their production line and teams. Illustrated below Heliatek's timeline:



This was the recognition of their market readiness and the maturity of their technology. Another sign of their differentiation: they price their product by square meter (and not per Watt).

Second example is [SunPartner](#), created in 2008, they develop a transparent thin-film photovoltaic technology. They followed a totally different path to previous example as they've been historically addressing multiple markets. They started by focusing on consumer electronics (smartphones, smartwatches) then advertising boards and more recently BIPV (greenhouses and today solar windows). Their latest fund raising (total of 70M€) allowed them also to invest into a production line for their solar windows. They also partner with leaders: [Sage Glass \(Saint Gobain Group\)](#), [Schuco](#) (windows), [Vinci Construction](#) etc.

So, what conclusions can we draw from these 2 examples?

First one is obvious: Deep Tech takes time, requires a long-term investment strategy (typically 10 years) and needs money: between 50 and 100M€ today (with own production line).

Second, is that success stories are scarce in this domain. Failure rate is high and many companies failed on commercializing emerging photovoltaic technologies.

Third is that market focus is key. Technology must not be the product! It's a mean to achieve a great product/solution, but never lose track that it must provide value to the end customer.