

Valuing solar PV
farm assets
Abstract



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In the past few years, focus on renewable energy has led to high growth in investments in renewable energy assets. Especially wind and solar farm assets have been exposed to great interest from investors and markets expect high growth rates in investments in these assets in the coming decades. Due to enormous growth and the potential for further growth in these 2 markets, we find it interesting to identify the structure of assets held by solar PV farm investors and to find suitable methods to value such assets. For our analysis of wind farm assets we refer to “Valuing onshore wind farm assets” and “Valuing offshore wind farm assets”.

This paper addresses how and why multiple regression analyses are a good supplement to more comprehensive cash flow models when valuing solar PV farm assets. Our analysis has been performed on the basis of transactions in the solar PV farm industry. Through our analyses of transactions in the solar PV farm industry we find that installed capacity, non-installed capacity and capacity in early-stage pipeline affect the enterprise value significantly.

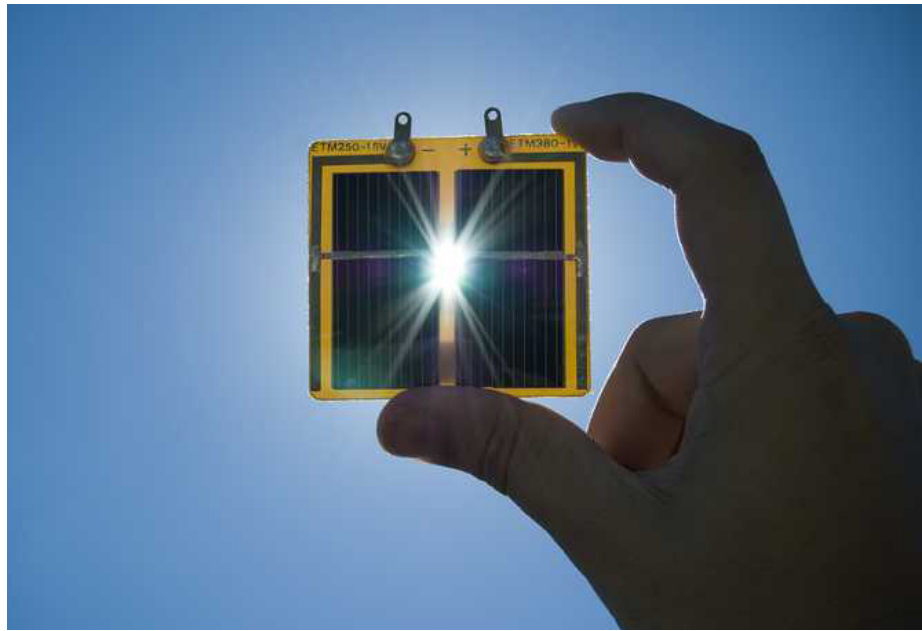
Since the release of the fourth edition of this analysis in August 2012, we have found an additional 32 transactions which were suitable for our analysis of solar assets. Our analysis now includes 101 solar PV farm transactions.

For the second consecutive year the analysis of solar PV farms have showed a decrease in the installed capacity multiple. This is illustrated in the figure below. Furthermore, due to a larger dataset, we have been able to perform a more comprehensive time analysis of transaction multiples similar to that in our analysis on onshore wind farms. We show that installed capacity multiple has decreased by EUR 1.4m per MW since the highest point in 2011.

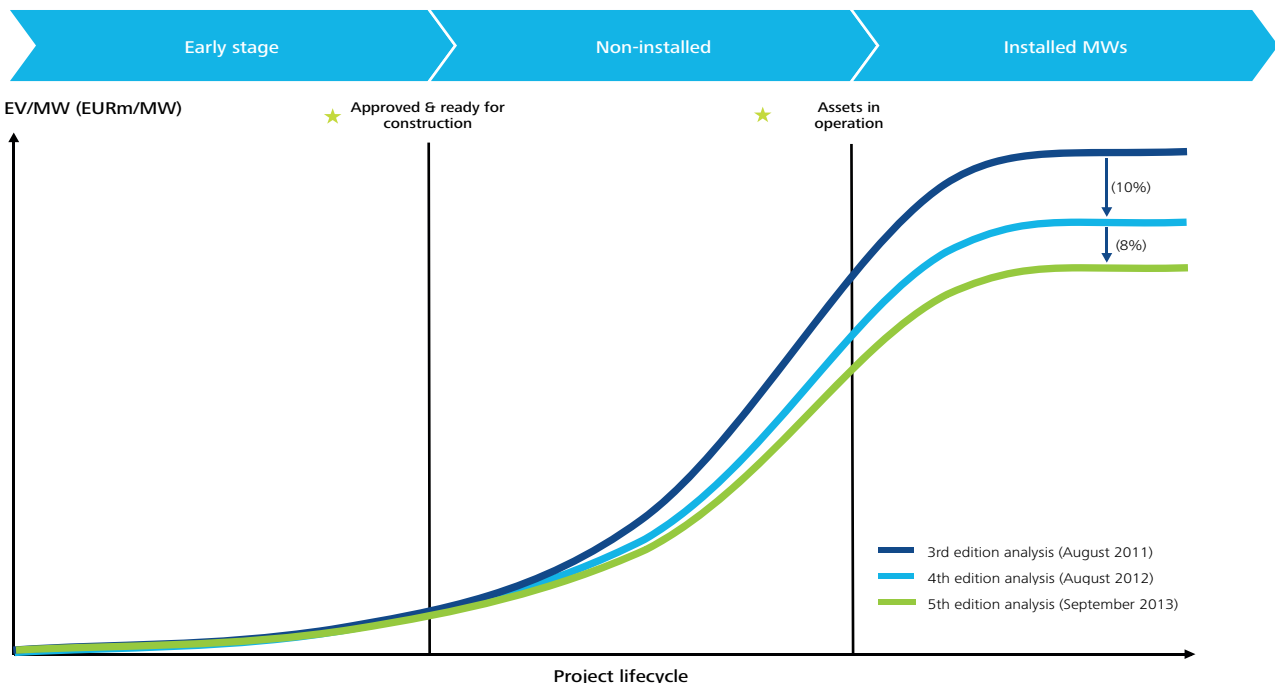
We believe that this decline is caused by tighter government subsidy policies in the European countries. Until now the subsidies have driven the developing market at high speed. However prices now seem to decline as investments in solar PV farms are expected to be recouped at lower rates of return.

Adding more data and refining our model have led to an increase in explanatory power from 85% to 91%. We expect that our conclusions drawn from the analysis will become stronger as we collect new transaction data and obtain a larger dataset. Especially we expect to reduce the uncertainty associated with the EV/MW multiples and reach a similar level of uncertainty as in our analysis of onshore wind farm assets.

For the full analysis, including all results and full dataset, we refer to the order form at the end of this abstract.



We show that the installed capacity multiple has decreased by EUR 1.4m per MW since the peak in 2011.



Source: Deloitte analysis

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