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About us

BloombergNEF PV Module Tier 1 List Methodology

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BloombergNEF has developed a tiering system for PV module products based on bankability, to create a transparent differentiation between the hundreds of manufacturers of solar modules on the market. Since this basic categorisation has been used as an advertisement by certain manufacturers, but should never replace a proper due diligence process in product selection, this document explains the tiering criteria and its limitations.

BloombergNEF PV Module Tier 1 List Methodology

October 1, 2020

1. Why divide the PV market into tiers?

BloombergNEF is frequently requested by clients for a list of 'major' or 'bankable' suppliers - in common industry parlance, tier 1 suppliers - for use in manufacturing forecasts, preliminary competitor analysis, and other internal comparisons. It is very common for industry players to refer to 'tier 1' players, but these terms are seldom defined or described, which is unhelpful for firms outside the solar industry trying to get a basic overview.

We strongly recommend that module purchasers and banks do not use this list as a measure of quality, but instead consult a technical due diligence firm such as RINA (formerly OST Energy), ATA Renewables, Wood Plc, PVEL, Black & Veatch, TUV, E3, STS Certified, Clean Energy Associates, PI Berlin, Pvbuyer, Enertis, Oravia, Leidos Engineering, the Austrian Institute of Technology (AIT) or Phoventus. These would usually consider what factory the module comes from, as well as the brand, and give an informed opinion on whether the modules will perform as expected.

2. Definitions

'Bankability' - whether projects using the solar products are likely to be offered non-recourse debt financing by banks - is the key criterion for tiering. Banks, and their technical due diligence providers, are extremely unwilling to disclose their whitelists of acceptable products. BloombergNEF therefore bases its criteria in what deals have been closed in the past, as tracked by our database – 35,000 photovoltaic financings worldwide as of October 2020.

We reserve the right to change these criteria at any time - particularly by requiring more information to consider a manufacturer tier 1. The companies will be reviewed every quarter based on information added to BloombergNEF's database. Only project financings for over 1.5MW of capacity are included in the database. Portfolio financings count for tiering only for projects with defined locations, and where the debt is secured on all the assets together, ie, if one project in the portfolio underperforms the bank has a claim on the rest of the portfolio.

We only tier manufacturers which actually own production facilities and sell under their own brands. Companies which outsource production under brand names are not tiered.

3. Criteria

Tier 1 module manufacturers are those which have provided own-brand, own-manufacture products to at least **six** different projects, which have been financed non-recourse by **six** different commercial (ie not development, not export-import) banks, in the past two years. The earlier of financing or commissioning date counts for tiering, ie refinancings of old projects do not count.

Solar tiering team solartiering@bloomberg.net

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This classification is purely a measure of industry acceptance, and there are many documented examples of quality issues or bankruptcy of tier 1 manufacturers. These 1.5MW+ deals must be tracked by our database, ie the project location (sufficiently to identify the project uniquely, ie street address), capacity, developer, bank and module maker must be in the public domain. Manufacturers which have filed for bankruptcy or a form of insolvency protection, or are in default of major financial obligations as stated in court documents, are removed from the tier 1 list until further notice.

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From October 2020, we will require additional evidence that a deal in China, India, Poland, Austria, Hungary, Switzerland or Turkey is non-recourse, in order to include it in our database. This is because non-recourse financing is not the norm in these markets, and a bank may not require technical due diligence on modules if the financing is not secured on the project. Nonrecourse financing is where the bank has agreed to take the risk of the modules failing, and will not be repaid from the balance sheet of the developer or equity holder if the project does not service the debt. Lease financing may be considered non-recourse.

This evidence must be in the form of either a public document like a press release from one of the companies involved, or an article about the project published by a recognized media firm, or a copy of the agreement with the bank. The agreement with the bank will be kept strictly confidential and only used to confirm the non-recourse nature of the financing to ensure database accuracy. After October 2020, emails or statements from developers will no longer be counted as sole evidence that finance is non-recourse. We reserve the right to reject any deal because there is no public evidence that it exists.

This classification is purely a measure of industry acceptance, and there are many documented examples of quality issues or bankruptcy of tier 1 manufacturers.

3.1. Tier 2 and 3

We do not publish a tier 2 or 3 list.

4. How do I access the tier list?

To get a quote for a Bloomberg subscription, which includes the quarterly tier 1 list, please contact sales.bnef@bloomberg.net. There is no other way to legally obtain the tier 1 list. Pirate versions released on the internet may have been doctored.

The list of tier 1 manufacturers is available to BloombergNEF's Solar Insight subscribers as part of the quarterly BloombergNEF PV Market Outlook. Note that a tier 1 listing is not a recommendation for the company or its products.

A company may be removed from the Tier 1 list at any time, so only the list for the most recent quarter is valid. Press releases, and claims from the company, do not constitute evidence that a firm meets BloombergNEF's tier 1 criteria.

5. How can manufacturers improve their ranking?

Since a tier 1 ranking is not a recommendation, we advise manufacturers against spending much energy pursuing it. On the other hand, one of the characteristics of a tier 1 manufacturer is transparency and good data availability.

A manufacturer can help us tier them accurately by sending us (at solartiering@bloomberg.net) data on the projects they have provided modules for, and the financing used to support these projects. This data must include enough information to identify the project uniquely - project size, location (street address or coordinates), developer name, bank which provided financing, type of financing, construction and financing dates. This information will be published by BloombergNEF in its subscription database.

Please do not send us confidential information for tiering purposes except to clarify that a deal is actually non-recourse – then we will keep it confidential! We need to include the basic deal details, including bank name, in our database.

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We strongly prefer well organized and complete information. Where confirmation is required in the form of a bank document, please try to send the confirmation with the full project details. It is not helpful to send large amounts of incomplete or inaccurate project details and may result in your entire submission being rejected without notice.

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Emails with data received before the first day of a calendar quarter (1 January, 1 April, 1 July, 1 October) will definitely be processed for the tier 1 list appearing in the PV Market Outlook about 50 days later. Data received in later emails may only appear in the database and be used for the tier 1 list for the following quarter.

6. How does a manufacturer know if they will be on the next tier 1 list?

For legal compliance reasons, we cannot disclose any substantial information about upcoming research prior to publication. Consequently we cannot confirm whether a manufacturer will or will not be on the tier 1 list in the next quarter until the list is published.

BloombergNEF clients have access to the full database, so can look at the deals in the database and count the banks themselves. If you are a BloombergNEF client, please ask your client service representative for details of how to do this.

7. Appeals

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The Bloomberg Solar Insight team's ruling on tiering for each quarter is final and will not be influenced by taking an Insight subscription, visiting our offices, buying us lunch, pleading, or sending us specification sheets, testimonials, or confidential information. The only thing that will influence the decision is on-the-record data about financed projects. Please read this text carefully before asking us questions already answered here, as we receive a high volume of queries and cannot enter into detailed correspondence. A Chinese and a Korean translation are available on request.



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About us

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