

## **Bloomberg New Energy Finance (BNEF)**

Bloomberg New Energy Finance (BNEF) has developed a tiering system for PV module makers which are only actually based on the manufacturer's bankability.

The concept of the ranking from BNEF is to help assess the quality of solar module manufacturers and their ability to support projects in the market.

Bloomberg New Energy Finance (BNEF) advises this categorisation should never replace a proper due diligence process in product selection.

### 1. Why divide the PV market into tiers?

Bloomberg New Energy Finance is frequently requested by clients for a list of 'major' or 'bankable' suppliers - in common industry parlance, tier 1 and tier 2 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' or 'tier 2' players, but these terms are seldom defined or described, which is unhelpful for firms outside the solar industry trying to get a basic overview.

### 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. Bloomberg New Energy Finance therefore bases its criteria in what deals have been closed in the past, as tracked by our database, which includes 7,000 solar financings worldwide as of April 2014.

Since the market is evolving, BNEF reserve the right to change these criteria at any time - particularly by requiring more information to consider a manufacturer tier 1. These tiers will be reviewed every quarter based on information added to Bloomberg New Energy Finance's database.

BNEF only tier manufacturers which actually own production facilities. Companies which outsource production under brand names are not tiered.

#### 2.1. Tier 1

Tier 1 module manufacturers are those which have provided products to five different projects, which have been financed non-recourse by five different (non-development) banks, in the past two years. (This is an increase from three projects and three banks in Q1 2014).

These deals must be tracked by our database, ie the project location, size, developer, bank financier and module maker must be in the public domain. One exception is manufacturers which have filed for bankruptcy or a form of insolvency protection; these are moved to tier 3 until further notice. Major defaults on

bond payments by the parent company will cause the firm to be moved to tier 2 or 3 regardless of the number of bank financed projects. This classification is purely a measure of industry acceptance, and there are many documented examples of quality issues or bankruptcy of tier 1 manufacturers. 4 April 2014

## 2.2. Tier 2

Module makers which have supplied product to some projects with bank financing, and have some industry reputation, are considered tier 2.

## 2.3. Tier 3

Module makers where there is little data on the deployment of their products, or which have filed for insolvency protection, are considered tier 3. We may consider moving some of the insolvent suppliers back to higher tiers if they rebrand post-insolvency and meet the normal tier 1 and 2 criteria in their new incarnation.

