Global Photovoltaic Market Trends, SNEC 2020
全球光伏市场趋势

Not All Gloom
也并不是哀鸿遍野

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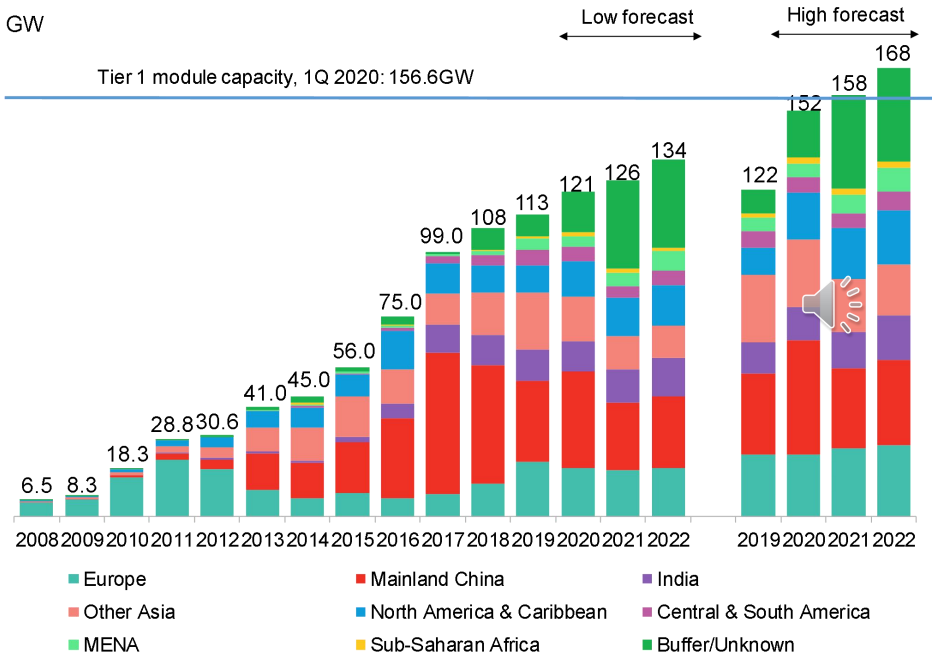
BloombergNEF

Global PV new build forecast pre-pandemic
新冠被定义为全球性流行病前光伏新增的预测



In late February 2020, we were confident of a record year for PV build, driven by China, India, the U.S. and Europe.

直到今年2月下旬，我们仍然认为2020会是新增装机破纪录的一年，而最大的几个市场是中印美欧

Source: BloombergNEF Note: Forecast as of February 19, 2020 when Covid-19 was still a series of outbreaks.

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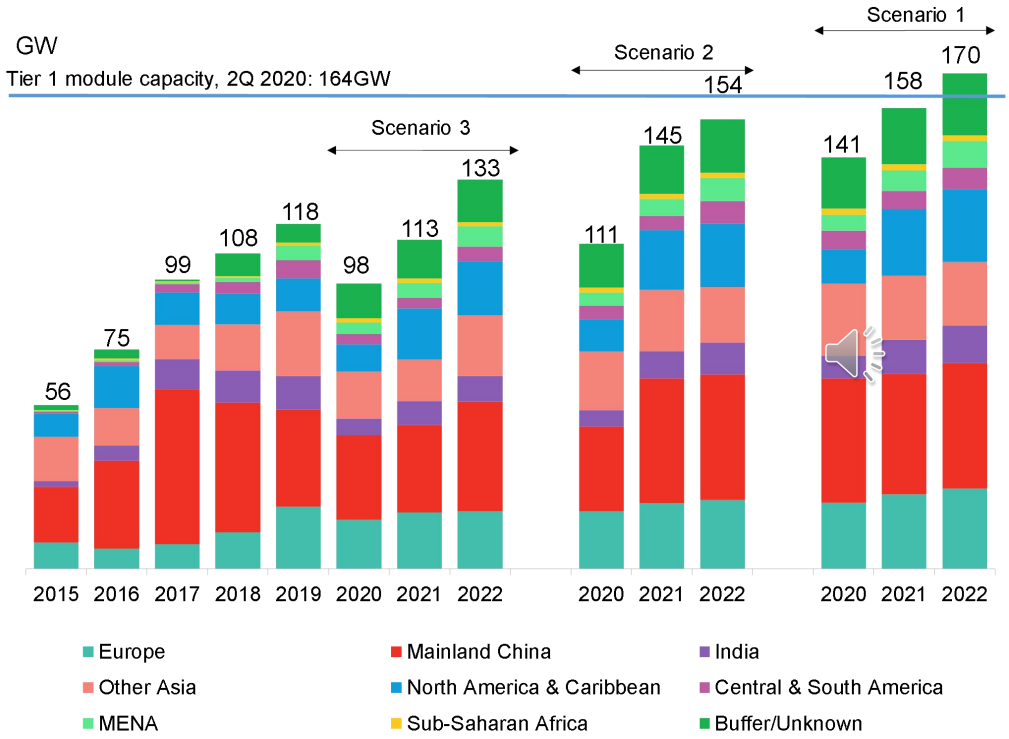
BNEF's current PV build forecasts, under different scenarios
BNEF针对疫情发展的不同情景假设做出的市场规模预测



Source: BloombergNEF Note: Forecasts as of May 2020.

We still believe that the global market can grow in 2020, if Covid-19 is limited to a single wave (Scenario 1) or if other factors compensate.

如果新冠疫情的爆发仅有一轮（情景1），或者有新的激励政策出台，今年的光伏市场仍然会较2019年有所增长。

In the worst case scenario in which multiple waves of pandemic cause global recession into 2021, we could see the market move slowly for years.

在最悲观的情景中，疫情会经历多次爆发且引发的全球经济衰退会延至2021年，对应的光伏市场放缓效应也会有起码两三年。

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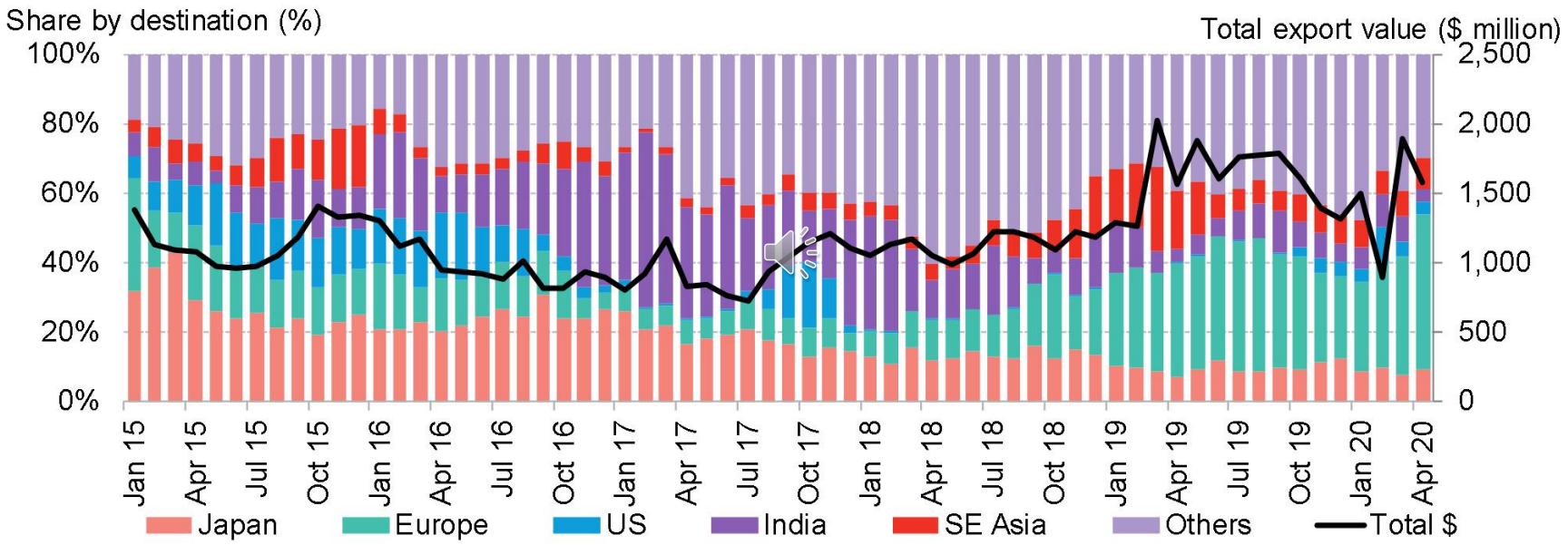
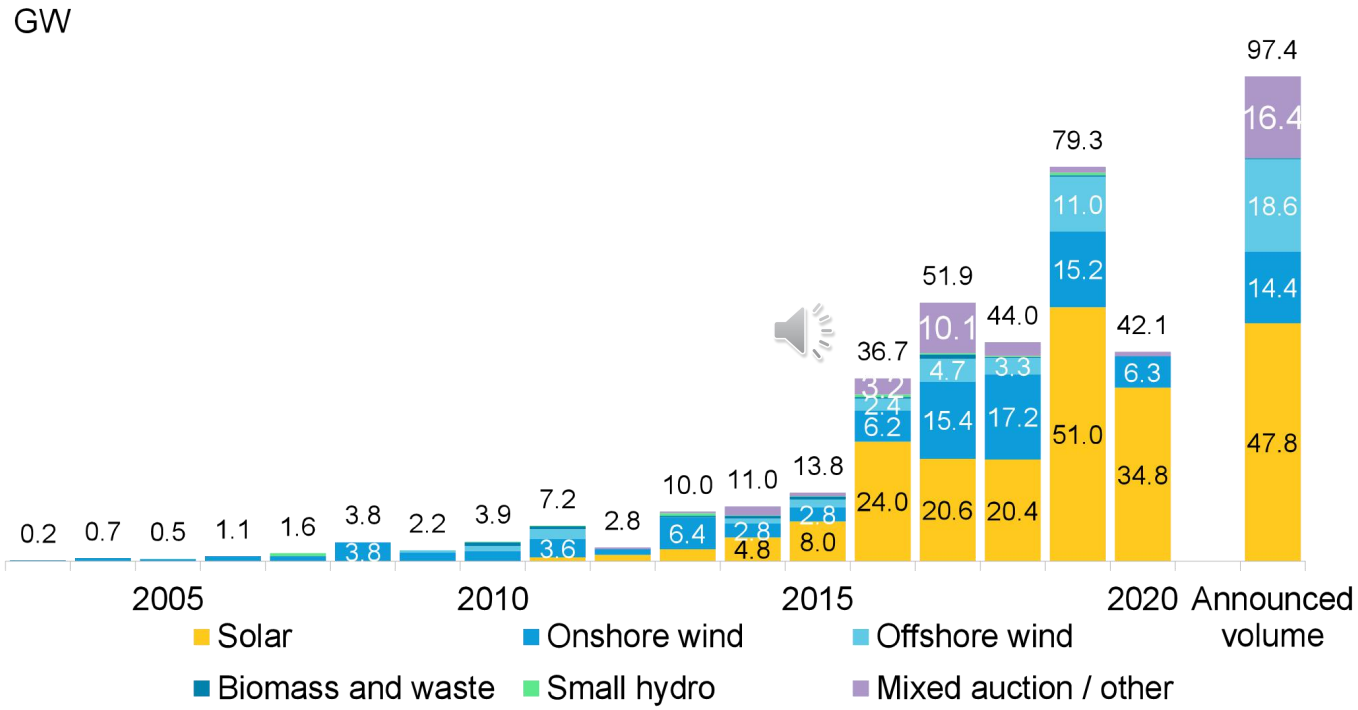
Chinese PV cell and module exports, by month
中国光伏电池和组件的月度出口情况



Source: BloombergNEF, Sinoimex. Tendata. Note: please see our online interactive data tool: PV Exports and Imports (web | terminal)

Annual auctioned and announced renewables capacity by technology
公开招标或宣布的各种技术新能源发电项目的规模



Source: BloombergNEF. Note: Uses plant-level data for auctions where support is awarded for generation.

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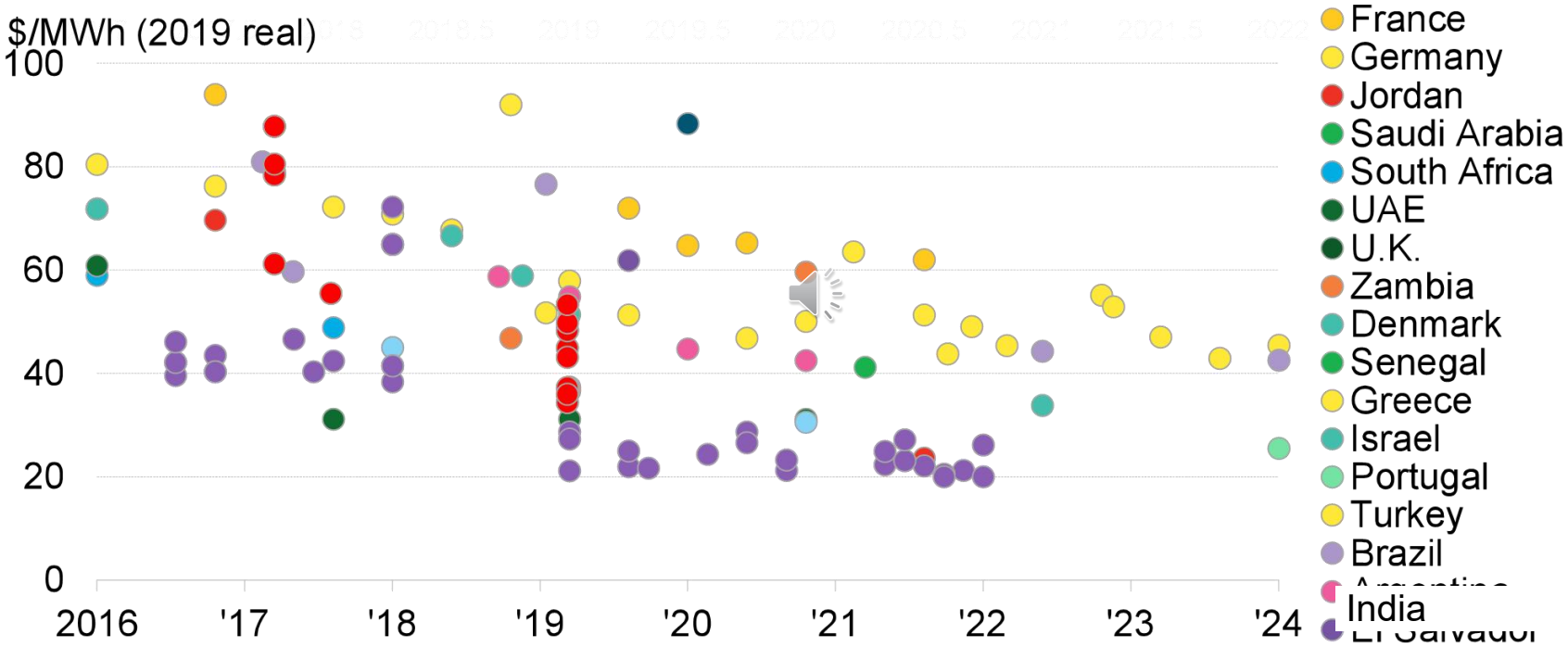
Global PV auction prices
全球范围光伏项目的竞标电价



Source: BloombergNEF. Note: Country data in charts show the levelized average winning bid in the auction. Data reflective of commissioning.

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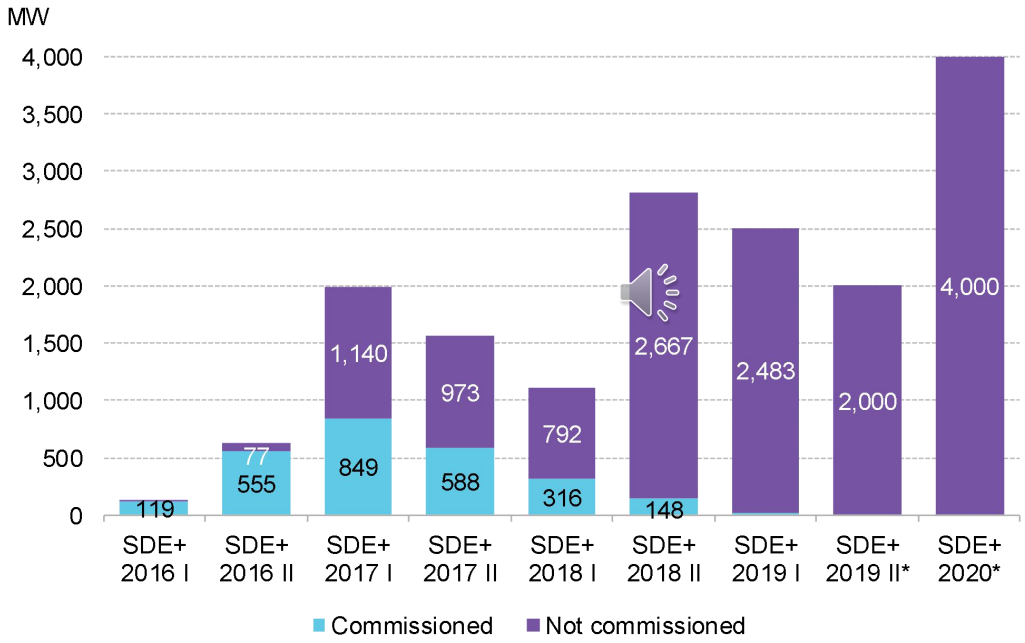
In the Netherlands, the 2020 solar auction round was twice as large as planned
2020年荷兰的光伏招标规模比最初的计划增加了一倍



Source: BloombergNEF, RVO. Note: 2019 SDE+ II and 2020 SDE+ pipeline is an estimate from the round which closed in April 2020, but the budget was doubled to 4 billion euros

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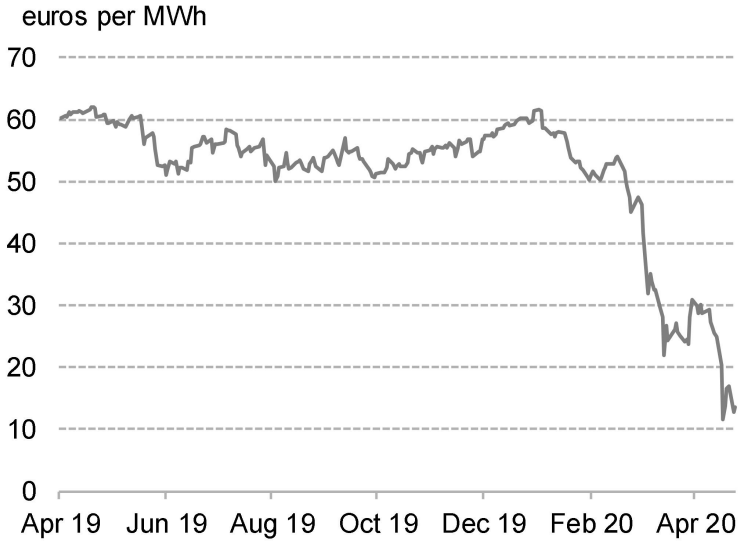
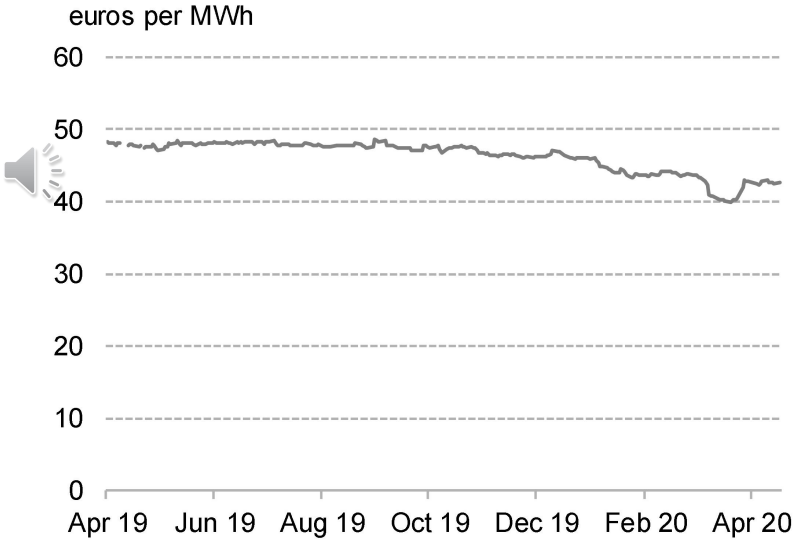
Power prices and hence merchant projects around the world have been hit
电价下跌给商用发电项目带来负面影响

Day-ahead electricity prices, Spain
西班牙日前电价



Spain's baseload electricity prices for delivery in 2023
西班牙2023年基荷电价



Source: Bloomberg Terminal, EEX, BloombergNEF

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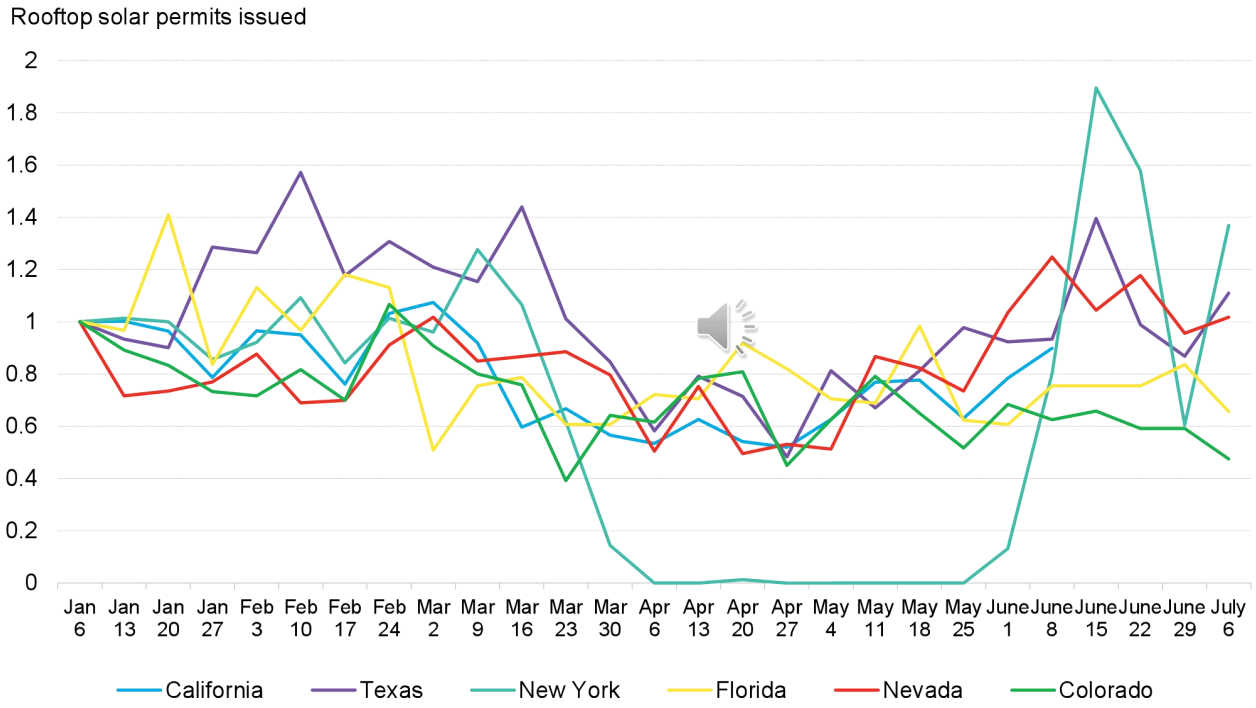
U.S. rooftop solar system permits issued in selected states
美国六州的屋顶光伏项目开发许可的颁布数量



Source: Ohm Analytics weekly tracker, https://ohmanalytics.com/weeklytracker/ , BloombergNEF

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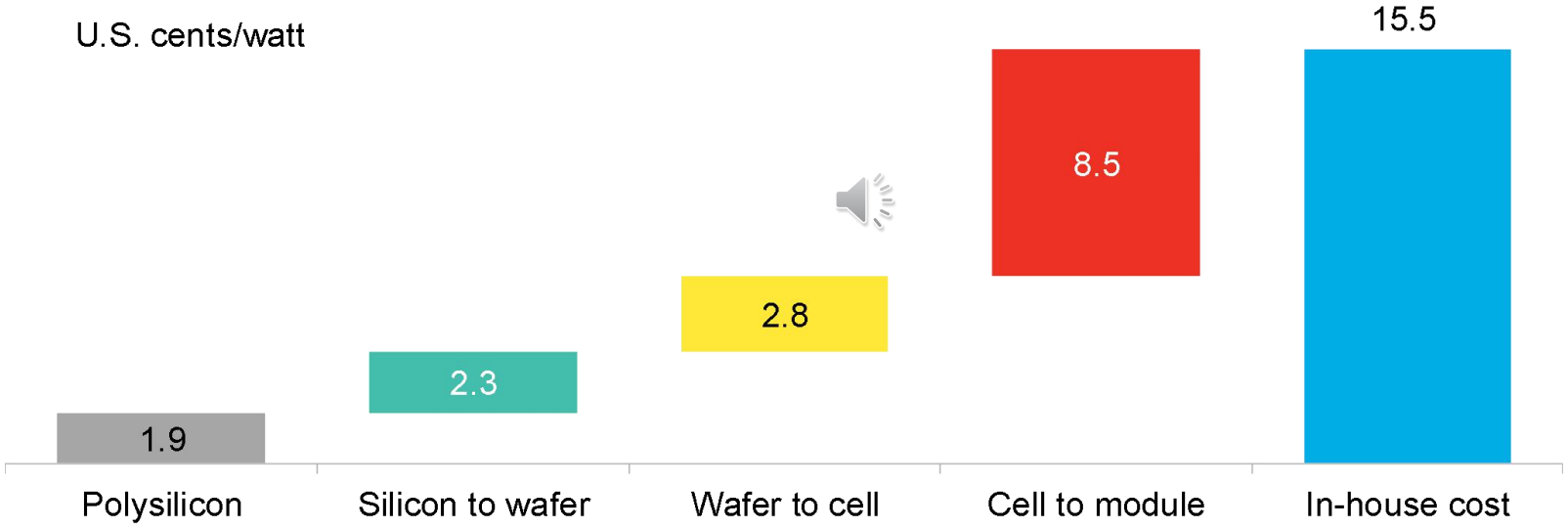
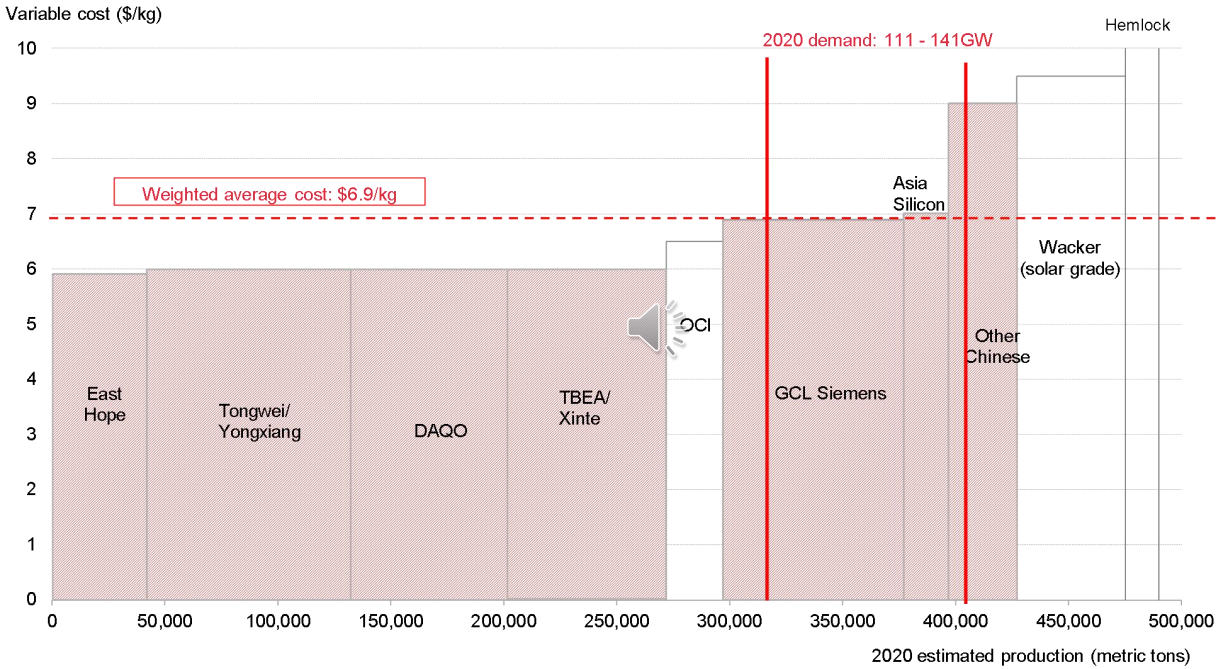
Best-case in-house mono PERC module cost for a vertically integrated module maker by end of 2020
2020年底垂直一体化的单晶PERC光伏组件最低生产成本



Source: BloombergNEF

Supply curve for solar grade polysilicon, 2020
2020年太阳能级多晶硅供应曲线



Source: BloombergNEF. Note: Blocks in red represent Chinese manufacturers. Variable cost includes processing cost and SG&A (selling, general and administrative expenses); depreciation is excluded. 2020 demand estimate is 111 - 141GW. Assumes 5% of the demand will be supplied by thin-film modules; 76% by mono with polysilicon consumption of 2.9g/W; 19% by multi with a polysilicon consumption of 3.5g/W, so average polysilicon use in c-Si of 3.0g/W. $1=7 yuan is assumed.

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Conclusions

- The fundamental drivers of solar are still strong, and we expect a return to growth in MW volumes in 2021
- There is some evidence that the short term outlook is not entirely negative, with data on rooftop installations mixed. Most utility scale solar has not been significantly delayed, except by extensions to deadlines.
- There are now 125 countries which we track with significant volumes of solar, and more all the time (for example Myanmar and Malaysia announced auctions for over a gigawatt each, as Covid-19 stimulus, in 1H 2020).
- Despite temporary turbulence, prices across the solar value chain are still expected to be compressed by increased supply over the year. There is a lot of competition among manufacturers.

- 光伏市场发展的本质驱动力仍然强劲。即便今年新增装机下滑，明年的数字会恢复。
- 疫情对全球光伏市场的短期影响并不是彻底负面的。不同地区屋顶项目的数据显示影响有正有负。除去某些国家延迟了并网截止时间，大多数大型电站受疫情影响被推迟的程度没有太严重。
- 目前我们追踪的光伏市场覆盖125个国家，包括很多新兴地区。例如缅甸和马来西亚在今年上半年各自宣布了超过1GW的光伏招标，作为对抗疫情损害经济发展而颁布的新的激励政策。
- 尽管有短暂的波动，光伏产品的价格在年度的时间范畴内仍然会由于制造业的宏观产能过剩和厂商的激烈竞争而下跌。

Source: BloombergNEF

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