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主旨:陳報有關美國太陽能面板安裝率下降事, 敬請卓參。

說明:

- 一、美「金融時報」(Financial Times)本(2018)年12月13日報導指出,美國太陽能面板安裝率受到川普政府本年初針對進口太陽能面板課徵額外30%關稅之影響,下降至2015年以來最低,重點如下:
  - (一)前述報導指出,太陽能之生產成本在過去10年已大幅下降,使其在美已具與石化燃料競爭之能力,惟其發展受到聯邦政府政策影響,包括投資獎勵及對進口面板課徵關稅等。川普政府為保護美國面板生產者,於本年2月對進口之太陽能面板課徵額外之30%關稅,造成太陽能面板產品價格上升,太陽能安裝率下降。美太陽能協會(SEIA)表示,該措施已導致美太陽能產業投資減緩並減少超過2萬個工作。
  - (二)受前述影響最顯著者為大型公用事業用之太陽能計畫( Large utility-scale solar projects), 自上年第三季 起,已有許多大型太陽能安裝計畫因關稅而暫緩執行。

國際貿易局 107/12/17 1077036559

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今年以來雖有數件暫緩計畫已再度運行,惟僅比2017年 成長2%左右。

- (三)另外,加州太陽能面板製造公司Sun Power收購已破產之SolarWorld部分資產,並維持SolarWorld在奧勒岡既有的製造廠,並僱用約250名員工營運,SEIA認為該僱用人數及營運規模與相關安裝、營運廠已損失之工作(約23,000)不成比例。
- (四)Sun Power公司首席執行長Tom Wener表示,渠認為資本主義將使成本下降,太陽能產業會"重新校準"(re-calibrate)。根據Wood Mackenzie之數據顯示,重新校準現象正在發生,美太陽能面板之生產成本自2017年攀升後,現已逐步下降,W執行長指出,下一世代(next generation)之太陽能面板生產成本將會下降30-40%。

二、檢送前述新聞如附件,併請卓參。

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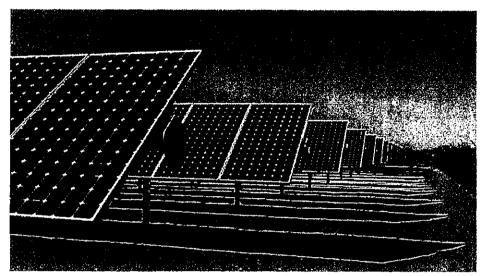
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### Renewable energy

# Trump tariffs darken prospects for US solar

New installation growth slows to weakest rate since 2015



YR: +27 'gy Industries Association said the tariffs had put a brake on investment and cost more than 20,000 jobs

#### Ed Crooks in New York YESTERDAY

Installations of new solar power capacity in the US slowed in the third quarter to their weakest rate since 2015, hit by the Trump administration's tariffs on imported panels.

The cost of solar power has plunged over the past decade, making it highly competitive against fossil fuel generation in many parts of the US, and it also often benefits from state mandates. But the pace of development has been dependent on federal government policy, including a tax credit on investment and tariffs on imported panels, which dominate the US market.

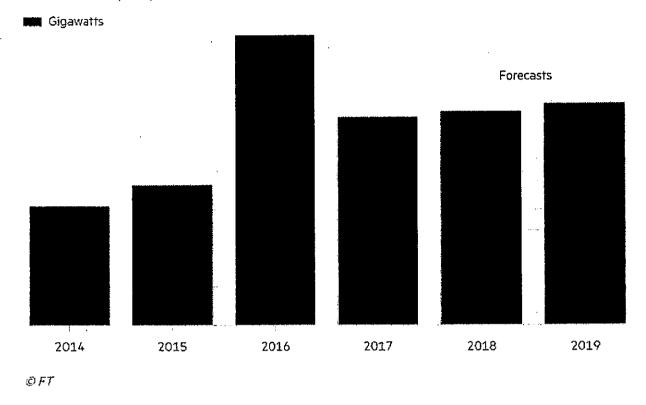
Levied from February at an initial rate of 30 per cent, President Donald Trump's tariffs were intended to protect US panel manufacturers. But the Solar Energy Industries Association, which represents developers and installers as well as manufacturers, said the tariffs had put a brake on investment and cost more than 20,000 jobs.

New solar generation capacity coming on line in the third quarter was particularly weak, because it reflected a delay in projects being given the go-ahead late in 2017, as uncertainty over the tariffs escalated and panel prices spiked.

Large utility-scale solar projects were most affected, because their economics are more sensitive to the cost of the panels than for smaller-scale rooftop solar. Colin Smith of Wood Mackenzie, which analyses the data for the SEIA, said that around the end of last year most of the large-scale project pipeline in the US had been put on hold.

### US solar installations have slowed since 2016

Photovoltaic capacity installed



"The tariffs have had an impact," he said. "Projects have been pushed out."

Even though many of those delayed projects are now going ahead, solar installations are expected to be only about 2 per cent higher this year than in 2017; a growth rate well below the pace of the industry's expansion in the early to mid-2010s.

Justin Baca of the SEIA said: "Apart from the actual effect of the tariffs, the business uncertainty has been disruptive."

There have been a few announcements of jobs being created or saved in US solar panel manufacturing. <u>California</u>-based SunPower bought some of the US assets of SolarWorld, a bankrupt German company that had been one of the manufacturers urging the Trump administration to restrict imports of panels. SunPower has kept about 250 people working at the former SolarWorld plant in Oregon.

The SEIA argues that those few stories of job gains have been greatly exceeded by the jobs in project development, installation and maintenance that have been lost or were never created, which it estimates at about 23,000.

Tom Werner, SunPower's chief executive, said he expected the industry to "re-calibrate", driving costs down to offset the impact of the tariffs. "Capitalism will work," he said. "If costs don't come down, then some of those projects aren't going to get built."

There are signs that recalibration is already under way. Wood Mackenzie's data show panel prices in the US falling steadily this year, after their jump at the end of 2017, and it has revised up slightly its forecast for installations in the next five years.

Mr Werner said SunPower would be part of that downward trend in costs, with its new "next generation" panels that will cost 30-40 per cent less than its previous generation.

Rob Kupchak, head of infrastructure and energy in the Americas for Macquarie Capital, the investment bank, said he thought the slowdown in the solar industry would prove temporary.

"We expect solar installation will only continue to ramp up," he said.

"I think there will be a load of solar being built in this country, because it is cost competitive and relatively easier to develop than other technologies. And the cost is going to keep going down."

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