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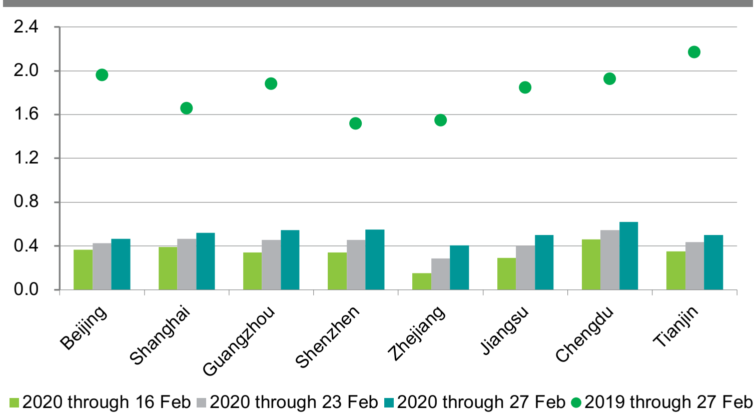
COVID-19 Impacts across China's labour markets and implications for the solar & battery supply chain

The outbreak of COVID-19 in China prompted the government to put travel restrictions in place and extend the Lunar New Year holiday by two weeks to constrain the spread of the virus. This has had multiple effects on the economy and the labour market. Since 10th February, many businesses have been slowly reopening, as they gain permission to resume work. Most regions of China, as of 21st February, had resumption ratios above 50%. The most affected area of Central China had resumed 51.7% of activity, whilst activity levels were stronger in Eastern China at 68.1%, particularly in the provinces of Shandong and Guangdong at 79.4% and 82.2%, respectively.

Migration return rate after Lunar New Year holiday (cumulative)



Notes: The return rate is defined as cumulative migration inflows after the Lunar New Year (from 25 January to date) divided by cumulative migration outflows 15 days before the Lunar New Year (from 10 January to 24 January). Both inflows and outflows are measured by Baidu migration index. 2019 series reflects comparable lunar calendar days.
Source: IHS Markit, Baidu. © 2020 IHS Markit

One of the core issues affecting Chinese businesses is labour supply. The Lunar New Year celebrations sees millions of migrant workers travel back to their home provinces, returning on mass after the festivities. However, with travel restrictions put in place during the holiday, many workers have been stuck in their home province. Businesses that have gained the permission to resume work have not been able to operate at full capacity due to a lack of workforce. The migration return rate of major cities in China gives a clear quantification of the extent of this issue. The return rate compares the cumulative migration outflows before the Lunar New Year (10th January to 24th January) to the cumulative migration inflows after the Lunar New Year (25th January to date). As of 27th February 2020, the return rate for major Chinese cities averaged 0.53, compared to 1.92 in same period in 2019. According to the government, only two thirds of workers will have returned by the end of February.

Travel restrictions are being lifted but the location of the epicentre of the outbreak has been a hinderance to travel. Hubei is a major transportation hub and with travel in the region restricted, many are struggling to get back to their province of work. Local governments and businesses have been forced to take action. In Zhejiang and Guangdong, cities have organised buses, trains and even planes to bring workers back. In Yongkang, 60 buses have been chartered to collect migrant workers from Yunnan province, whilst Zhejiang has turned to provinces with labour surpluses for help, bringing in over 20,000 workers. Ningbo, Zhejiang, has even offered subsides to workers that will return to work, to increase labour availability.

With constrained production capabilities, the manufacturing sector is experiencing a severe slowdown in the first quarter of 2020 but a rebound in production is expected later in the year, once workers return. As with the SARS outbreak, we expect manufacturing wage growth for 2020 to move stronger than previously anticipated. The immediate impact of COVID-19 has been labour shortages, causing heightened demand for labour, which in turn is putting pressure on wages to increase for those available manufacturing workers. In addition to this, the recovery in production expected later in the year will compensate for the lost earning potential in the beginning of the year.

However, other industries and businesses of a smaller scale are those that are likely to see irrecoverable losses. The Lunar New Year is typically the second busiest period of the year for tourism, retail and consumer services. With restrictions on travel and the advice to stay home, non-essential purchasing has been impacted and consumer demand has declined sharply. As a result, small and medium businesses, particularly within the services sector, are struggling to cover their labour costs and have reportedly been reducing wages or not paying them entirely. With cash flow issues widely reported in the sector, job losses are feared. Irrecoverable impacts will also be seen in the transportation sector, where we are revising down our wage growth expectations for 2020. As of 17th February, passenger trips were down 80.2% year on year, due to the restrictions on travel. Whilst many still need to travel back to their province of work, it will be the loss of usual daily transportation that cannot be regained and will impact the annual wage growth of the sector.

To combat this, the Chinese government has unveiled several policies to provide support for the labour market These include returning unemployment insurance contributions and deferring the collection of social security and tax. Furthermore, provincial governments have set aside millions of Yuan in funds for use in incentivising employment growth. Examples includes those of Ningbo, which is offering subsidies of up to 300,000 Yuan for companies with year on year increases in staff hiring and Huzhou that is providing allowances of 1,000 Yuan for each new hire.

Coronavirus has already had a clear impact on the labour market, which is preventing the to return to normal activity levels in China. As workers slowly return to their province of work, production will continue to be constrained into March. The manufacturing sector is expected to see a strong rebound in the second half of the year which, when combined with the impact of the current labour shortages, will see stronger wage growth for 2020. However, some sectors and smaller businesses will suffer irrecoverable losses. The scale of the loss in consumption that prevails will determine the strength of wage and job losses. Governmental policies will go some way to alleviate the impact for business that are hardest hit but the growth potential for retail and transportation has already been marked.

Case Study:
COVID-19 impact on Solar PV & Battery Supply Chain

Strong headwind for China’s solar and battery supply chain with implications for global markets in H1 2020

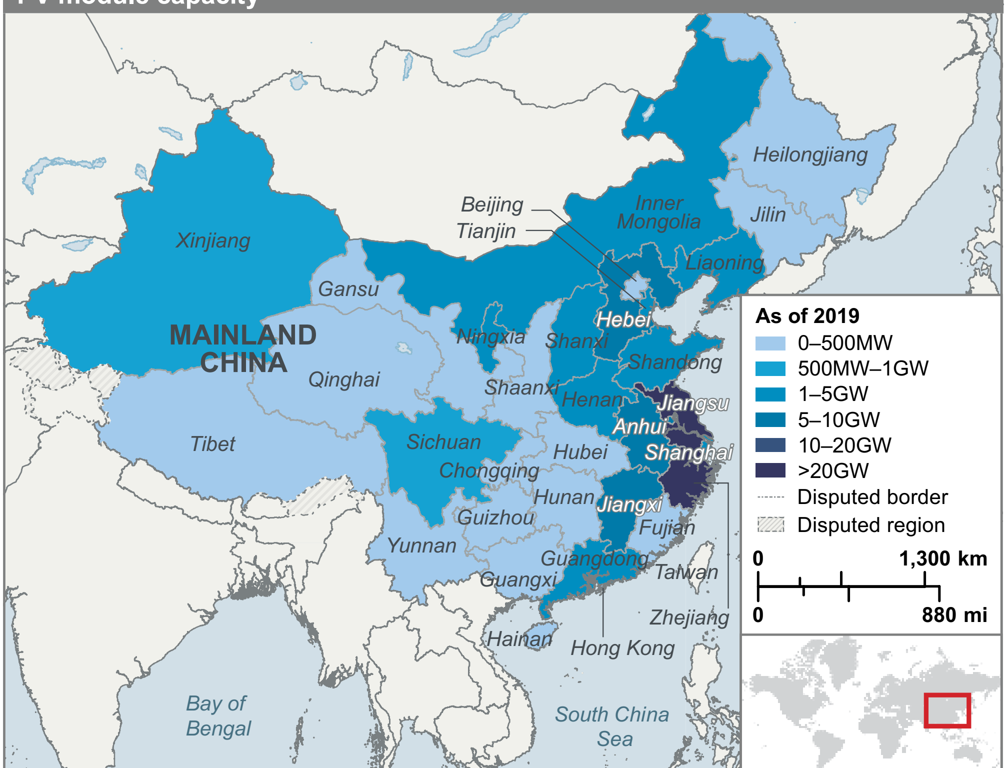
Key takeaways

- Although it is still early to evaluate the total impact of the novel coronavirus (COVID-19) it is clear that its disruption impact on the solar and battery supply chain is Q1 2020 will be critical for both China and international markets.

- The impact of COVID-19 goes beyond China and could influence product availability and installation times in global markets since 62% of global module capacity is located in China and concentration in mainland China is even bigger for other parts of the solar supply chain. Conservatively, IHS Markit forecasts at least one month of manufacturing production and transportation will be impacted disrupting logistics at different points of the supply chain throughout H1 2020.

- In most provinces, factories were not allowed to restart manufacturing until 9 February, after which delays in transportation, component procurement, and manufacturing ramp-up will continue to disrupt most manufacturing industries in China. Cell and module players are the most impacted due to delayed restarting of manufacturing operations and location of the biggest players, close to Hubei province, that are subject to strict regulations on transportation and returning staff.

PV module capacity



Source: IHS Markit: 1763342

- Costs relating to labor, transportation, sales, operation and materials have been increasing, which are likely to slow down the process of project installation and connection in China in H1 2020. Non-Chinese factories, which are relying on materials from mainland China, are expected to face shortage of material supplies caused by transportation and production constraints in China and may be exposed to operation risks and short-term price increases of major components.

- The production of inverters has also been impacted and suppliers are likely to be impacted by transportation and labor constraints and are unlikely to ramp up production before 24th February as workforce may have to self-quarantine for 14 days. Given seven of the top-fifteen suppliers are from China and also some leading suppliers have Chinese production, this could cause inverter supply disruption mostly to international customers. Furthermore, it will give a window of opportunity for suppliers with non-Chinese production and ample electronic component inventory to sell to customers who may need security of supply in the coming quarters. If manufacturing were impacted for more than a few weeks in China, PV inverter prices could increase due to capacity and potentially electronic component constraints.

- Finally, China contributes to over 70% of global battery cell production capacity with South Korean and Japanese manufacturers also playing an important part. International supply of batteries for car manufacturing and grid-connected energy-storage industries should be influenced by the outcome of this epidemic outbreak that has almost put all manufacturing activities to halt across China for about a fortnight. Leading battery suppliers might have the capacity to keep up the demand within a limited time frame, benefiting from stronger cash flow and inventory base. The outbreak may pose more of an issue for second-tier suppliers with batteries produced on an on-demand basis. Prior to the epidemic outbreak, a few European auto brands already announced having difficulties to produce EVs, resulting from shortage of batteries produced by leading cell makers. The current status quo would only add another layer of severity where a stringent supply of batteries may spread further among major automakers both inside and outside of China. However, EV makers with in-house or joint-venture battery manufacturing capability outside of China could potentially be less influenced or exempted. In this regard, the pace of installation by energy storage system integrators could also be decelerated for those who procure batteries from China and share battery suppliers with automakers.

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