JinkoSolar - Q3 2019 Transcript

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Call participants:

Ripple Zhang -- *Investor Relations Manager*

Kangping Chen -- *Chief Executive Officer and Director*

Gener Miao -- *Chief Marketing Officer*

Charlie Cao -- *Chief Financial Officer*

Maheep Mandloi -- *Credit Suisse -- Analyst*

Philip Shen -- *Roth Capital Partners -- Analyst*

Brian Lee -- *Goldman Sachs -- Analyst*

John Segrich -- *Luminus Management -- Analyst*

Prepared Remarks:

Operator

Ladies and gentlemen, thank you for standing by and welcome to Quarter Three of 2019 JinkoSolar Holding Company Limited Earnings Conference Call. [Operator Instructions]

I would now like to hand the conference over to your first speaker today Ms. Ripple Zhang. Thank you, Ripple. Please go ahead.

Ripple Zhang -- *Investor Relations Manager*

Thank you, operator. Thank you everyone for joining us today for JinkoSolar's third quarter 2019 earnings conference call. The Company's results were released earlier today and available on the Company's IR website at www.jinkosolar.com as well as our Newswire services. We have also provided a supplemental presentation for today's earnings call, which can also be found on IR website.

On the call today from JinkoSolar are Mr. Chen Kangping, Chief Executive Officer; Mr. Charlie Cao, Chief Financial Officer; and Mr. Gener Miao, Chief Marketing Officer. Mr. Chen will discuss JinkoSolar's business operations and the Company highlights followed by Mr. Miao, who will talk about the sales and marketing. And then Mr. Cao who will go through the financials. They will all be available to answer your questions during the Q&A session that follows.

Please note that today's discussion will contain forward-looking statements made under the Safe Harbor provisions of the US Private Securities Litigation Reform Act of 1995. Forward-looking statements involve inherent risks and uncertainties, as such our future results may be materially different from the views expressed today. Further information regarding these and other risks is included in JinkoSolar's public filings with the Securities and Exchange Commission. JinkoSolar does not assume any obligation to update any forward-looking statements except as required under the applicable law.

It's now my pleasure to introduce Mr. Chen Kangping, CEO of JinkoSolar. Mr. Chen will speak in Mandarin and I will translate his comments into English. Please go ahead, Mr. Chen.

Kangping Chen -- *Chief Executive Officer and Director*

[Foreign Speech] Thank you, Ripple. Good morning and good evening, everyone, and thank you for joining us today.

[Foreign Speech] I'm pleased to report strong operational and financial results for the third quarter, which I believe marks a turning point for our business as we begin to increasingly benefit from our investments in technology, leading integrated cost structure and expanding mono wafer capacity, which will steadily strengthen our overall profitability and expand margins going forward. Total revenues during the quarter were $1.05 billion, an increase of 8.2% sequentially and 11.8% year-over-year.

Our leading integrated production costs continued to flow and ASP went up sequentially, allowing us to initiate a reset of our gross margins and expanded to 21.3% during the quarter. Excluding the benefit from anti-dumping and countervailing duties, gross margins still increased a solid 6 percentage points year-over-year to 18.5%. Our margin reset supported record high operational profit of $89.4 million and a net income of $50.9 million, significant increases of almost 2 to 3 times sequentially and year-after-year -- year-over-year as our mono wafer production capacity ramps up and we further optimize our cost structure in the fourth quarter and 2020. Our overall profitability will continue to steadily improve.

[Foreign Speech] Due to the delayed announcement of the government subsidy policy for PV projects in China earlier this year, a large number of project bids remained in the bidding or preparation stages during the third quarter, which resulted in many of them being pushed back into the fourth

quarter and in the first quarter next year. This delay is expected to drive strong domestic demand over the next six months especially since the national renewable energy information management center recently announced that, it's speeding up the formulation of subsidy policy for PV projects in 2020. So, early release of next year's subsidy policy and an increase in number of grid parity projects will support demand next year, which is expected to increase strongly and exceed 40 gigawatt. In addition, the Chinese government released a policy that creates the foundation for our market-based mechanism to facilitate electricity trade to drive economic growth and help phase out coal-fired power plant nationwide, over the long run solar power which gradually replace traditional source of energy at a faster rate, went down under market conditions that help support the continued reduction in production costs and continue to develop of new technology costs.

[Foreign Speech] In 2019, a number of PV projects were put into operation globally, that are able to generate power at extremely low prices. According to data from Bloomberg, PV is now the lowest cost energy source in over 10 countries. In the past PV was hampered by fluctuations in production capacity and profitability circles, with the cost of solar energy now falling below traditional energy sources and the competitiveness increasing in renewable energy. We are very confident and optimistic that global demand will increase strongly next year. Based on our current estimates we believe installations next year will be approximately 20% higher than this year.

[Foreign Speech] We began our technological transformation back in 2016 when we began producing mono wafer and have since then accumulated three years of operational and technical expertise which we applied to our mono production facility in Leshan, Sichuan Province. This technological transformation is now complete with phase 1 of the production facility having ramped up to full 5 gigawatt capacity, and the phase 2 of the production facility reaching full 5 gigawatt capacity during the second quarter of 2020.

I believe this reflects our strategic foresight and ability to rapidly execute. We are at a strategic running point -- turning point in our corporate history with mono based high-efficiency products accounting for nearly 75% of the total shipments during the quarter, which is expected to increase to 99% of total shipments in 2020. Our mono wafer products have low oxygen content and extended operational lifetimes which makes the cell [Phonetic] product's low life decay and high efficiency. At the same time, our manufacturing costs have steadily declined to quickly become the industry benchmark. The increased production capacity for our high quality and low cost leading mono wafers have facilitated a significant increase in the proportion of products made through our fully integrated manufacturing process, which allow us to maintain a industry-leading cost structure and issue a stable gross margin going forward.

[Foreign Speech] The efficiency of our N-type cells reached a record high of 24.58% during testing conducted by the Chinese Academy of Science in June. We expand our production capacity of N-type cells to 800 megawatt during the third quarter and are currently ramp up to full production in the fourth quarter, by developing new technologies and driving innovations in materials. Our mass product -- produced N-type cell efficiency leads the industry across a range of indicators and is expected to exceed 24% efficiency in the future.

[Foreign Speech] We recently unveiled a new Tiger module, which offers our clients significantly improved efficiency, lower production costs and a better internal rate of return, using 9-busbar Mono PERC and Tiling Ribbon technology. The module realized 20.78% efficiency and a peak power output of 460 watt providing an easy performance boost that doesn't require much extra effort to install. The Tiger module is suitable for both utility and rooftop installations. Meanwhile we are strengthening our in-house integrated capacity to rapidly put new itinerations [Phonetic] of our high-quality innovative products into mass production, which ensures their competitiveness.

[Foreign Speech] Our in-house high efficiency annual silicon wafer, solar cell and solar module production capacity has now reached 14.5 gigawatt, 9.2 gigawatt and 15 gigawatt respectively. By the end of the third quarter of 2019 this includes 11 gigawatt of mono wafer capacity and 9.2 gigawatt of PERC cell capacity. By the end of 2019, we expect our in-house and annual silicon wafer, solar cell and solar module production capacity to reach 15 gigawatt, 10.6 gigawatt and 16 gigawatt respectively, which includes 11.5 gigawatt of mono capacity, 9.8 gigawatt of PERC cell capacity and 800 megawatt of N-type cell capacity.

By the end of 2020, we expect our in-house annual silicon wafer, solar cell and solar module production capacity to reach 20 gigawatt, 10.6 gigawatt and 22 gigawatt respectively, which includes 18 of mono capacity, 9.8 gigawatt of PERC cell capacity and 800 megawatt of N-type cell capacity.

[Foreign Speech] With our technological transformation complete, we are now at a turning point in which our technology leading integrated cost structure global footprint, high-quality products will open up enormous new growth opportunities, and strengthen our overall profitability and margin profile going forward. With domestic demand rebounding strongly and overseas demand driven by grid parity and aggressive new clean energy targets, we expect the fourth quarter to be a big quarter for us. Based on current estimates, for the fourth quarter of 2019, we expect total solar module shipment to be in the range of 4.2 gigawatt to 4.4 gigawatt. Total revenue for the fourth quarter is expected to be in the range of $1.17 billion to $1.23 billion. Gross margin for the fourth quarter is expected to be between 18.5% and 20.5%. For the full year 2019 the Company estimates total solar module shipment to be in the range of 14 gigawatt to 14.2 gigawatt.

[Foreign Speech] We traditionally released full year guidance when we report the fourth quarter of the previous year. But with the demand growing rapidly, both domestically and overseas for our high-efficiency mono products we have strategically decided to convey our confidence in next year's strong growth, a quarter earlier than expected. Based on current expectations, we expect the total solar module shipment to be in the range of 18 gigawatt to 20 gigawatt for the full year 2020 and increase around 35% year-over-year.

[Foreign Speech] Thank you, Ripple. With that I will turn it over to Gener.

Gener Miao -- *Chief Marketing Officer*

Thank you, Mr. Chen. Total shipments in the third quarter was 3,300 megawatts, flat with the second quarter with a large number of domestic installation delayed into the fourth quarter and the first quarter of next year, overseas shipments accounted for 90% of our order book during this quarter. ASPs have risen sequentially. We are at a strategic turning point in our corporate history with mono based high efficiency products accounting for nearly 75% of the total shipment during this quarter. This number is expected to increase to 99% in 2020 and over 40% of which will be the new products. Due to the late announcement of government policy in China earlier this year, many major developers were forced to delay their projects with a portion of those installation pushed back into the first quarter of 2020.

Delayed demand from 2019, the increase in grid parity projects expected in 2020, as well as anticipated policy announcement early for next year, leave us very confident and optimistic about domestic demand in 2020 will increase strongly and exceed 40 gigawatt. The majority of which will be composed off grid parity and bidding projects. Demand in US market remain very strong, where many states have begun implementing very aggressive clean energy policies and accelerated the -- phasing out coal-fired power plant.

In California, for example, all new homes will require rooftop solar panels, starting next year. There was a rush this year to submit projects in order to secure the highest tax exemption under the Solar ITC. A large portion of these projects are expected to drive demand and begin installation over the next four years. According to the 2019 US installation estimate complied by Bloomberg, our market share in the US is currently, approximately 20%. Recently we joined the Board of the Solar Energy Industry [Phonetic] Association, the national trade association representing the US solar energy industry, and we are working to further expand the market share by leveraging our leadership in the industry, strong brand recognition, competitive and reliable products, and extensive customer base.

Turning to Asia Pacific. We expect a rush for large scale projects to begin next year in Japan in order to rescue -- secure the high bidding tariff. As the nation readies for its Olympic Games next summer, costs are expected to increase as it becomes harder to construct the new installation which will drive demand for high-efficiency modules. With large scale projects nearing the end of their growth phase, distributed PV projects will become the next major growth driver in Japan. And India are expected to surge next year with the safeguard tariff reduced to their lowest levels. A new round of FIT is under way in Vietnam, which will support a stable growth there. In Victoria, Australia industrial, commercial and residential projects are expected to grow rapidly following the return of the rooftop solar panel rebates and improved economic efficiency from distributed PV.

The renewable energy certificates recently launched in South Korea will drive sustainable demand for floating solar over the next three years. Large scale projects in Thailand, Philippines and Malaysia are also about to start. In Europe, Germany is building 3 to 4 gigawatt solar power stations as distributed PV continues to grow steadily. Spain has begun phasing out coal-fired power plants and has set an annual installation target of 4 gigawatt. This policy will also remove barriers to grid connection for distributed PV which will stimulate growth in the industrial and commercial sectors.

Installations across Southern Europe are expected to increase as grid parity approaches. Subsidies handed out under the stimulation of sustainable energy production, FTE plus will continue in Netherlands. Distributed installations will also grow strongly across Northern Europe, the bidding mechanisms initiated in France is expected to generate 2 gigawatt of demand annually, while subsidies for small scale PV systems are driving the merging of distributed PV. Bids for large scale projects are taking place across the Middle East. Gigawatt level projects such as [Indecipherable] projects in UAE, [Indecipherable] projects in Saudi Arabia and [Indecipherable] in Kuwait will drive installation demand in the region for the next three years.

Large scale bidding projects in Brazil are proceeding according to the plan, while subsidies for distributed projects are driving rapidly growth in industrial and commercial sectors. The Mexican government cancelled all bids at the beginning of this year, which has open up space for the development of a private bidding mechanism, which could possibly become, the new business model for purchase of electricity. Demand in Central America is gradually growing as it is -- in Colombia following the successful launch of their first auction, while recent economic and the social unrest in Argentina and Chile has tempered demand. We are confident that Latin American demand overall will continue to increase sustainably over the long term.

To conclude, the delay in China of many projects to early next year, a third [Phonetic] in demand from Europe and the US to replace conventional energy sources, large scale agriculture PV subsidies and a significant increase in large scale project installations in India, together with the steady growth in emerging markets such as Middle East, South Africa, Egypt and Eastern Europe, leave us extremely confident that next year will be strong.

We have strategically developed our resources globally and now have seven production facilities supporting shipments to almost 100 countries with over 8,000 orders annually. This has allowed us to take a large market share in many emerging countries. We have proven our ability to navigate the difficult market environments over the years, which is a direct result for flexible and adaptable market-oriented production model. Combined with our global operations, local technology service team, supply chain management and the differentiated product strategy, we will be able to continue strengthening our market leading position. We focus on competitiveness of our products, as much as demand.

Since 2017 we have set nine world record for cell efficiency and three for module efficiency. Continuously investing in R&D has enabled us to launch differentiated and more competitive products at a faster speed. At this turning point, our technology, scale and the leading cost structure will ideally position us to benefit from emerging opportunities. Our Cheetah series become the industry standard and recently we launched a new high efficiency Tiger module at All-Energy Australia 2019, which introduced Tiling Ribbon technology to the market for the first time. This is another technical advancement that reflects our ability to innovate cutting edge technology with all -- will support the march toward grid parity. Recently JinkoSolar was recognized along with 52 other manufacturing champions in the latest published list by the MIIT and the CFIE for its excellence in manufacturing of its major products, solar modules which are defined as enterprise focusing on specific manufacturing segment for the long term, with international leading technology and the market share of a single product among the top three globally.

During the third quarter, we attended seven trade shows and participated in 44 conferences worldwide. We also hosted over 11 customer events and 57 co-marketing activities with key partners across the globe. We also received eight awards. We have committed to the RE100 and EP100 initiative as the first global solar manufacturer, and promised to power all its solar panels and global operations with 100% renewable power by 2025. By 2030, we target to deploy an energy management system across all our operations to improve energy productivity by 30% when compared to 2016. As one of the leading Company in the renewable energy sector, we consider it important to be a responsible role model for a sustainable future.

With that, I will pass it over to Charlie.

Charlie Cao -- *Chief Financial Officer*

Thank you, Gener. We achieved record gross profit and income from operations in Q3 despite push out of China demand, transitioning to the high-efficiency mono technology has been largely completed making Q3 a turning point for the Company. This gross margin reset has been driven by increasing shift toward integrated model capacity leading in-house integrated production costs, new premium products and global footprint. With our strong competitiveness in the industry, we are optimistic for the sustainable growth in the future. Stepping into 2020, we expect total shipments in the range of 18 to 20 gigawatts, mainly underpinned by the strong growth outside China and our diversified customer base globally.

The capacity will expand to 28 gigawatts wafer, including 18 gigawatts mono wafer, 10.6 gigawatts high-efficiency cell, and 22 gigawatts of solar modules. Mono-based high-efficiency products are expected to make close to 100% of our shipments in 2020 and all predominantly served by in-house capacity. The capex for 2020 will be around $300 million, significantly lower than in 2019, given our capacity managing is largely done. We plan to finance the capex by onshore renewable infrastructure fund and other operating cash flows.

Turning to the strong performance of Q3. Total revenue was $1 billion, up 8% quarter-over-quarter. Gross margin substantially improved to 21.3%. Excluding the ADD, CVD reversal benefits, gross margin was 18.5% compared to 16.5% in Q2. Income from operations was $89.4 million, up 136%

compared to sort of $37.9 million in Q2. EBITDA was $100 million, up 52% compared to $66 million in Q2. Non-GAAP net income was $42.1 million. This translates into non-GAAP diluted earnings per ADS of $0.96. Operating expenses were 12.8% of total revenue excluding the disposal of obsolete equipment, operating expenses accounted for 12.2% of total revenue compared to 12.8% in the second quarter.

Moving to the balance sheet. At the end of Q3 our balance of cash and cash equivalents were $518 million compared to $543 million at the end of Q2. We continued to drive our operating efficiencies. AR turnover days improved to 63 days in Q3 compared to 76 days in Q2. Inventory turnover days reduced to 93 days in Q3 compared to 104 days in the second quarter. Total debt was $1.7 billion compared to $1.9 billion at the end of second quarter in which $309 million was related to our international solar projects. Net debt was $1.1 billion compared to $1.2 billion at the end of second quarter. The decrease was mainly due to the decrease in the borrowings.

In November, we entered an agreement to sell two solar power plants in Mexico with a combined capacity of 155 megawatts. This transaction is subject to customary closing conditions. Once the transaction is completed, the total debt will be reduced by $133 million. The sale of overseas solar power plants is consistent with our growth strategy to focus our core solar manufacturing business.

Regarding our guidance in fourth quarter, we expect total revenue to be in a range of $1.17 billion to $1.23 billion. We don't expect any ADD, CVD reversal benefit in the fourth quarter. The gross margin of fourth quarter is expected to be in a range of 18.5% to 20.5% compared to 18.5% in the third quarter, excluding the ADD and CVD reversal benefits.

This concludes our remarks on the third quarter. We are now happy to take your questions. Operator?

Questions and Answers:

Operator

Thank you. Ladies and gentlemen, we will now begin our question-and-answer session. [Operator Instructions] Your first question is from Maheep Mandloi from Credit Suisse. Your line is now open. Please go ahead.

Maheep Mandloi -- *Credit Suisse -- Analyst*

Hi, everyone. Thanks for taking the question, and nice quarter. Can you talk about the order visibility in 2020, just looking at the 18 to 20 gigawatts of shipment guidance? It's a nice 35% uplift, but just wanted to understand which geographies are driving it and how much visibility do you have into that order book as of now?

Gener Miao -- *Chief Marketing Officer*

Thanks for the question. I think -- I think we are having over one-third of the order book fulfilled for 2020 right now. We are starting to increase that level into a higher level by the year end and the next two months time, let's say. And for the geographic coverage, majority of them are non-China demand, many international demand, I think we have secured a lot of global coverage including Europe, US, emerging markets, Asian markets, etc.

Maheep Mandloi -- *Credit Suisse -- Analyst*

Got that. And just on the China market, if you can touch upon the new policy for 2020, when do you expect that announcement to happen? We've been hearing something to happen in the next month or in Q1, but any clarity on when the new subsidy would be announced and then when you can expect the new round of bids in 2020?

Gener Miao -- *Chief Marketing Officer*

I think, definitely, the lower than expected installation number in China in 2019 will encourage, let's say the government side to announce the policy and also the bidding policy for 2020 earlier than -- definitely earlier than 2019. We have seen this news coverage about the details or to drop the details -- drop to the detail about 2020 policies such as, what's the proposed feed-in-tariff, seeding feed-in tariffs and also what's the expected installation volume. So from that policy or the rumor side, we are pretty confident on that policy, it could be announced in the next one to two months, conservatively at least before Chinese New Year everything could be set up. And, do you need me to remind you on these numbers?

Maheep Mandloi -- *Credit Suisse -- Analyst*

Yeah, sure. That will be helpful.

Gener Miao -- *Chief Marketing Officer*

Yeah. So according to what we have read on this Chinese -- Chinese, let's say newspapers, we have seen, the drop to the policies are around like a $0.04 -- sorry $0.04, $0.08 and $0.10 for the utilities, distribution, generation and individual homeowners -- I see -- we see that dropped in the news. So I'm not quite sure what should be the -- what will be the final policy. If that number comes true, we definitely are expecting over 40 gigawatt installation in 2020.

Charlie Cao -- *Chief Financial Officer*

And then Maheep...

Maheep Mandloi -- *Credit Suisse -- Analyst*

And then -- yeah, sorry, go ahead, Charlie.

Charlie Cao -- *Chief Financial Officer*

It's Charlie. I just supplement some backlog. I think in China, in this year, the bottleneck is the policy coming out late and developers need sufficient time to get connection approved, to get the land secured. So, some of the developers, there is no sufficient time. So some of project will be delayed in Q1 next year. But from the policy regulator perspective, next year, it's totally different, we are going to move very quickly. So just like, as Gener said, the policy, the framework, the scheme of the framework, generally it's the same with this year. The subsidy level will be down a little bit, but still very

positive and the policy will -- for sure come out very early in the next couple of months. So, frankly speaking we're very optimistic for China next year versus this year.

Maheep Mandloi -- *Credit Suisse -- Analyst*

Got it. And a quick follow-up on that, the 40 gigawatt China demand in 2020, does that include the 2019 projects being delayed into the first half next year, or that's...

Charlie Cao -- *Chief Financial Officer*

It's the -- it's brand new -- it's brand new, the 2020 projects.

Maheep Mandloi -- *Credit Suisse -- Analyst*

Got it. And then just one housekeeping and I'll jump back in the queue. The Q4 revenue guidance, does that include the Mexico asset sale and if not, then could you touch up on the timing of the sale?

Charlie Cao -- *Chief Financial Officer*

Yeah, good question. This revenue does not consider the revenue from the monetization of Mexico projects. So, it's purely for the 4.2 to 4.5 -- 4.4 gigawatts module shipments. And Mexico project, we have signed agreements. It's going to submit some kind of regular approval procedures. We expect it to be closed in a couple of months, and it could be, by the end of the year or early next year in Q1.

Maheep Mandloi -- *Credit Suisse -- Analyst*

Got it. I'll jump back in the queue. Thank you.

Charlie Cao -- *Chief Financial Officer*

Thank you.

Gener Miao -- *Chief Marketing Officer*

Thanks.

Operator

Thank you. Your next question is from Philip Shen, who is from ROTH Capital Partners. Your line is now open, Philip. Please go ahead.

Philip Shen -- *Roth Capital Partners -- Analyst*

Hey guys, thanks for the questions. First one is on pricing, can you confirm what your Q3 ASP was? Our basic calculation was for about $0.315, but that seems a bit high. Also, what was your module only revenue for Q3? And then looking ahead for Q4 and given the guidance that you have there, we get to an implied ASP of $0.279. We closed on that, and if not, can you talk about the ASP that you see for Q4? Thanks.

Gener Miao -- *Chief Marketing Officer*

Hi, Philip. I will take the ASPs. I will leave the revenue question to Charlie. So for ASP side as we just stated, I think the ASP is slightly up compared to Q3 versus Q2. And for Q4, it will drop, because there is some more shipment to China. It's a more spot market, the current market price is lower than the contract we have signed quite a while ago. So that's why the blended ASPs got lower. I think it's -- on approximate as the range that you just talk about, the detailed number we have to check -- we have to check. And for the Q1 and for the ASP trend, we believe that market will continue let's say in general, it's stable, but steadily going down quarter-by-quarter or year-by-year. I think, the whole industry is going into grid parity, which will be very helpful to stabilizing the turbulence of this market price. But in general, in order to be more competitive for solar installations globally, I think, the module or the whole solar system installation or Pacific -- particularly the LCOE cost will continue to -- going to be more competitive.

Charlie Cao -- *Chief Financial Officer*

So, Philip, could you -- just repeat your question on the revenue.

Philip Shen -- *Roth Capital Partners -- Analyst*

Yeah. Just simplistically, for your Q3 revenue, how much of that was pure module revenue that we can associate with your shipments? How much was wafer revenue, for example?

Charlie Cao -- *Chief Financial Officer*

It's roughly -- I think the majority of -- 97% -- 97%, 96% is coming from module revenue.

Philip Shen -- *Roth Capital Partners -- Analyst*

Okay, that's great. So, then Gener, you were just talking about ASPs trending down through next year. Can you talk about the margins, you expect to see by quarter next year? If we start to see -- if we look at global pricing for mono PERC especially, and also China pricing, it's quite weak and you guys have been able to maintain a pretty high ASP. So, maybe talk about that premium, and then also, Charlie, if you can talk about the margin trend that you see for 2020, that would be very helpful. Thanks.

Gener Miao -- *Chief Marketing Officer*

Firstly, I think, China, the ASP is strong -- I think starting from third quarter, and throughout to the October, and because the China demand is weak and due to the late policy. And now actually starting from the later October, what we are seeing is, China demand is huge, it's pumping up. So the capacity

constraint is a big issue for us. And you know the -- it's very tight [Phonetic] for the solar cell resources even the solar cell market price, and I think, increase a little bit. And for Jinko, we have -- we put in the business highlights, in the third quarter earnings release, because it's a kind of turning point -- a turning point, because we have completed the transformation for the mono-based technology capacity. And if you look our capacity, basically, you can generally think about from looking to 2022, we have integrated capacity each quarter, roughly 4 gigawatt. So and the -- and now we, yeah, I think we are at very good positions in terms of our capacity scale, in terms of our in-house integrated production cost. Under that, we are promoting the high-efficiency products like the Tiger, the next generation high-efficiency technology integrated with TR technology and we are promoting the swan, the bifacial.

So next year just likely the two or maybe three new products is going to account for over 40% of our total shipments. So the new product, my key point is, the new products, the efficiency is higher, output is higher, but the production cost may be lower or the same with traditional products. And, so we are focusing on the in-house capacity gross margins, and we are targeting roughly 20% to 25%. So that is our goal.

Philip Shen -- *Roth Capital Partners -- Analyst*

And just to be clear Charlie, that's what you could possibly see for next year, 20% to 25% for your in-house margins, for 2020?

Charlie Cao -- *Chief Financial Officer*

It's -- yeah, it's in-house. We still need to do, when we do 20 gigawatts, we still need to do some -- third party by the solar cells, but what I'm thinking, for each quarter in general, we have 4 gigawatts, roughly 4 gigawatts integrated capacity and we still need to do some offside. So it's depending on each quarter, some quarters, we were made by more from third party, some quarters we need...

Gener Miao -- *Chief Marketing Officer*

So in general, Philip. I think Charlie's point is, with the higher level of the in-house, let's say whether going into greater the capacities and we are manufacturing a higher more competitive and higher efficiency products which can generate a better margin -- a standard commodity. And we are -- and we have more confidence than ever that we -- the gross margins and also the profitabilities are much more controlled.

Philip Shen -- *Roth Capital Partners -- Analyst*

Okay, great. One last quick question, as it relates to Jinko Power debt. Can you just update us on whether or not there is any liability there for Jinko Power? How much of the Jinko Power debt are you guaranteeing, if any, these days? Thanks.

Charlie Cao -- *Chief Financial Officer*

I think it's kind of legacy -- legacy relationship, you understand back into 2016, when we bring up the Jinko Power we have pre-existing guarantee relationship with Jinko Power by the end of 2016. So the guaranteed amount, we have been -- we have disclosed in 20-F each year, and it's going down year-over-year. In each year, on average roughly, the currency number will be down $50 million to $100 million. So you can get the year end, let's say 2018 20-F number and the -- $50 million to $100 million and you can get roughly number.

Philip Shen -- *Roth Capital Partners -- Analyst*

Okay. So roughly, now it's about $600 million, is that right?

Charlie Cao -- *Chief Financial Officer*

I don't think so. I don't think so. I am going to stay back to you. I think it should be lower.

Philip Shen -- *Roth Capital Partners -- Analyst*

Okay, great. Okay, thank you. I'll pass it on.

Gener Miao -- *Chief Marketing Officer*

Thank you.

Operator

Thank you. Your next question is from Alex Meisel from Goldman Sachs. Your line is now open. Please go ahead.

Brian Lee -- *Goldman Sachs -- Analyst*

Hey guys, it's actually, it's Brian Lee here. How is it going? Thanks for taking the questions. Maybe just, Charlie, on the gross margin question, going back to that for a bit. I appreciate the view on the 20% to 25% internalized capability on gross margin. As we think about maybe the cadence though, because this year you had sort of a weaker first half in terms of margin profile versus the second half, how you're exiting here. Could we expect something similar in 2020 given, again, you sort of have the similar dynamics, where you'll be ramping up capacity, I know you had some capacity ramp up headwinds on the margins earlier in the year. And then it looks like, obviously pricing is going to be weaker here heading into year-end and then seasonally in Q1, typically we get another pricing downtick. So, as you think about all those moving pieces, is it fair to assume you kind of start lower on the margins here in early 2020 and then you ramp-up, just like we saw in '19.

Charlie Cao -- *Chief Financial Officer*

I think it's a totally different scenario, let's say 2020, the first half year versus the first half year of the 2019, if you look at our capacity, low demand and ramping up schedules. Actually our capacity investment in 2019, we invest roughly $500 million. The mono wafer, the PERC cell came out in the second half year of 2019. So the impact is happening in the second half year. And the first half year, 2019, it's extremely worst case, if the PERC cell is in supply shortage, the price is very high. And we have very limited capacities, we need to buy a lot of volume for the PERC cell for the first half year 2019. But the storage it's not -- it's going to never happen next year, because our capacity came out, in the second half year this year. Our new, second stage, the mono wafer capacity, will come out very quickly in the second quarter to -- first quarter, we are ramping up the second stage, the mono

wafer starting from now and Q1 continue to ramp up at full capacity in second quarter.

So the key point is, the volume is there and it's still very different with the first half year 2019. And I just give you some numbers -- the volume, the production volume next year 2019 will be dramatically increased for the mono wafer, for the PERC cell, for the modules. If you look at the production volume, it's different concept with capacity, because capacity came out late this year and early next year. So, year-over-year production volume for mono wafer is up 115% year-over-year to 2020 versus 2019. For the PERC cell, the PERC cell is up roughly 60% and module is 70%. So my key point is, integrated production volume, I just talked, each quarter roughly 4 gigawatts, that is produced by our cells. And we have confidence in our leading cost structures and we have confidence in our current profitability levels. Even for the, I think the ASP, if -- it's a...

Gener Miao -- *Chief Marketing Officer*

So when we do the -- when we did the sales planning [Phonetic] in 2020 as well in order to stabilize the gross margins against this turbulence on the market price or the spot market changes, we are trying to let's say plan equivalent volume growth against our capacity ramping up plan. Sorry, that will help -- be helpful -- we believe will be helpful to stabilize the gross margins. We do not want to surprise the capital market.

Brian Lee -- *Goldman Sachs -- Analyst*

Okay, fair enough. I appreciate the color. Maybe a couple more. Just on the modeling here for 2020, capex you said is going to be $300 million. I know you spent closer to like $500 million, you said Charlie for 2019. In the past, I think you said $0.07 to $0.10 a watt, capex for wafer and $0.02 to $0.03 a watt for module. If I run those numbers, it seems like 2020 capex will be more in line with the 2019 capex. Is there something changing for the capex figures for 2020? Or are you getting subsidized on any portion of the capex for 2020? And then, with that capex view for 2020, do you expect to be free cash flow positive on the year?

Charlie Cao -- *Chief Financial Officer*

Yeah. I think we are very confident. Next year we are going to be free cash flow positive and first is, our profitability level should be very high growth next year. The EBITDA, the operating cash flow will be very healthy next year. And second one is the capex question. The investment level is lower basically next year versus this year. And next year it's just 5 gigawatts capacity for the mono wafer and roughly 6 gigawatts, the module capacity. And it's going to -- if the break down, is roughly $160 million for the mono wafer, $100 million for the module. And I think $40 million for the upgrades, maintenance capex.

And if you look at 2019, we invest a lot -- we invest on the PERC cell conversion to existing module cell as well as reinvesting our next generation N-type PERC cell, reinvesting on the mono wafers. And for the second stage, 5 gigawatt mono wafer come out, second quarter next year. Some capex has already being reflected in this year. So this is another -- small -- some impact on the capex next year.

Brian Lee -- *Goldman Sachs -- Analyst*

Okay, understood. And then last one, housekeeping. I think in the past you've put in the slides, the capex, the D&A and the operating cash flow for the quarter. Can you provide those figures for the third quarter?

Charlie Cao -- *Chief Financial Officer*

You mean the depreciation rate.

Brian Lee -- *Goldman Sachs -- Analyst*

Capex depreciation and operating cash flow, I think you've usually put those metrics into the slides.

Charlie Cao -- *Chief Financial Officer*

Depreciation and amortization should be roughly the same or slightly higher with the second quarter. The operating cash flow actually is pretty good -- third quarter, because our profitability, gross margin. And as you can see our operating efficiency improved for inventories, for accounts receivables, I think it's roughly $100 million, $100 million to $120 million operating cash flow in the third quarter.

Brian Lee -- *Goldman Sachs -- Analyst*

And then just on the capex for the third quarter?

Charlie Cao -- *Chief Financial Officer*

Capex, I need to check, but -- I need to check, but cumulatively for the Q1 to Q3, roughly $410 million. So I'm talking about this full year, $500 million.

Brian Lee -- *Goldman Sachs -- Analyst*

Okay. So $410 million through the first three quarters.

Charlie Cao -- *Chief Financial Officer*

Yes.

Brian Lee -- *Goldman Sachs -- Analyst*

Okay. Thank you, guys.

Charlie Cao -- *Chief Financial Officer*

Thank you.

Gener Miao -- *Chief Marketing Officer*

Welcome.

Operator

Thank you. The next question is from John Segrich from Luminus. Your line is now open. Please go ahead.

John Segrich -- *Luminus Management -- Analyst*

Hey guys, just want to come back to kind of the profitability of the business. You've done a great job of improving the margin. But as you kind of look at it, it seems like the margin improvement is really been driven this year by ASPs going up, rather than cost going down. And I guess that's attributable to the fact that you've moved from lower spec product to like more mono PERC, is that the right way to think about it?

Charlie Cao -- *Chief Financial Officer*

It's not right, John. And you're right, and Q3, our ASP is slightly up and impacted the gross margin. I think it's not so big.

John Segrich -- *Luminus Management -- Analyst*

I mean, it looks like, it is up $0.02, Charlie, isn't it?

Charlie Cao -- *Chief Financial Officer*

I don't think so. We have our revenues. And the second one is, the Q3, our production volume, because of the mono wafer, the Q3, we are in the ramping up stage, so it's ramp up stage by stage. The output, let's say, the full capacity of 5 gigawatts new, mono wafer capacity, it's running in full capacity, it's 100%. The third quarter is roughly, just output is 20% to 30%. So fourth quarter it's going to be 100% impact. So, my answer to your question is, it's because you know, firstly, our production costs, improved quarter-over-quarter. Second one is Q3, the impact, the volume for the new capacity impact is not -- is limited, it's just 20%, 30% full capacity, it's the same situation for the cell capacity.

John Segrich -- *Luminus Management -- Analyst*

Right. Okay. So looking at fourth quarter then you've got ASPs, you're guiding down a little over 10%. And you would expect your cost to fall similarly?

Charlie Cao -- *Chief Financial Officer*

It's still kind of impact. Fourth quarter, because we don't have 100%, the capacity. The volume has increased a lot. What I'm talking about, volume itself deals volume, for the mono wafer, for the PERC cell, in the fourth quarter. Second, one is -- our in-house production cost continue to improve, so after, against our exposure to China was relatively lower ASP. So, that is in line with guidance, the gross margin in the fourth quarter will improve.

John Segrich -- *Luminus Management -- Analyst*

Stable. Okay. Can you give us the in-house cost for 2Q, 3Q? And what you think it is in 4Q?

Charlie Cao -- *Chief Financial Officer*

We don't like. It's confidentiality, but you can do some estimate, ASP, gross margin, you can use some kind of calculation.

John Segrich -- *Luminus Management -- Analyst*

Okay, all right. Maybe we'll follow up offline. Thanks, Charlie.

Gener Miao -- *Chief Marketing Officer*

Thank you.

Operator

Thank you. There are currently no more questions in queue. I'd like to hand the call over back to Ripple for closing remarks. Please go ahead.

Ripple Zhang -- *Investor Relations Manager*

Thank you for joining us tonight. This concludes the call.

Operator

Thank you, Ripple. [Operator Closing Remarks]