JinkoSolar - Q4 2023 Transcript

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Transcript

Operator (participant)

Hello ladies and gentlemen, and thank you for standing by for JinkoSolar Holding Co, Ltd Fourth Quarter 2023 Earnings Conference Call. At this time all participants are in listen-only mode. After management's prepared remarks there will be a question-and-answer session. As a reminder today's conference call is being recorded. I would now like to turn the meeting over to your host for today's call, to Ms. Stella Wang, JinkoSolar's Investor Relations. Please proceed, Stella.

Stella Wang (Head of Investor Relations)

Thank you operator. Thank you everyone for joining us today for JinkoSolar's Fourth Quarter 2023 Earnings Conference Call. The company's results were released earlier today and are available on the company's IR website at www.jinkosolar.com, as well as on newswire's services. We have also provided a supplemental presentation for today's earnings call, which can also be found on the IR website. On the call today from JinkoSolar are Mr. Li Xiande, Chairman and CEO of JinkoSolar Holding Co, Ltd, Mr. Gener Miao, CMO of JinkoSolar Co, Ltd, Mr. Pan Li, CFO of JinkoSolar Holding Co, Ltd, and Mr. Charlie Cao, CFO of JinkoSolar Co, Ltd Mr. Li will discuss JinkoSolar's business operations and company highlights, followed by Mr. Miao who will talk about the sales and marketing, and then Mr. Pan Li who will go through the financials.

We 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 U.S. 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 this 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. Li Xiande, Chairman and CEO of JinkoSolar Holding. Mr. Li will speak in Mandarin and I will translate his comments into English. Please go ahead, Mr. Li.

Xiande Li (Founder, Chairman, and CEO)

[Foreign language]

Speaker 10

We are pleased to have achieved very impressive operational and financial results in a challenging year by leveraging our advantages in N-type TOPCon technology, globalized operations, and integrated capability. Thanks to strong execution by our team, our module shipment for the full year increased 76.4% year-over-year to 78.5 GW, back to the top position in the industry. Benefiting from our efforts in cost optimization, our profitability for the full year improved significantly year-over-year, with gross margin at 16% compared to 14.8% in 2022. Net income was $485.8 million, up 4.56x year-over-year. Adjusted net income was $573.8 million, up 1.93x year-over-year. Module shipments in the fourth quarter was 26.3 GW, exceeding our guidance.

As module prices fell more than expected in the fourth quarter and nearly 50% of our modules were sold to the Chinese market at lower prices, gross margin for the fourth quarter was 12.5%, a significant decline from 19.3% in the third quarter.

Xiande Li (Founder, Chairman, and CEO)

[Foreign language]

Speaker 10

In China, newly added PV installation reached 216.88 GW in 2023, up 148.1% year-over-year, to a historical high. At the same time, excess supply in various links of the industrial chain led to price declines. Tender prices for modules at the year-end decreased over 40% to below CNY 1 per watt compared to the beginning of the year. Export volumes of PV products in 2023 increased significantly year-over-year, whereas export volume fell slightly as a result of decreasing prices. In January and February 2024, seasonality combined with extreme competition from certain manufacturers intensified market panic and irrational prices. We remain cautious and rational in the face of abnormally low tenders. In addition, while some manufacturers without competitive cost or advanced products reduced or suspend production, we maintained our leading utilization rates in the industry as a result of cost advantage and high order visibility.

Into March, as demand picked up and inventory reduced, module prices gradually stabilized and some bidding prices rebounded slightly. In the short to mid-term, we expect the decline in module price will significantly improve the economics of solar energy, and we anticipate demand in the global PV markets will continue to increase in 2024. Meanwhile, rapid iteration of new technologies and the elimination of obsolete production capacity will also accelerate the consolidation of the industry. Market share for the top 10 module manufacturers is expected to increase from 70% in 2023 to over 90% in 2024. We are confident to consistently enhance our competitiveness through cyclical fluctuations, and we expect our market share to further increase in 2024.

Xiande Li (Founder, Chairman, and CEO)

[Foreign language]

Speaker 10

Thanks to our integrated manufacturing strategy and leading position in N-type TOPCon technology in the early stage. By the end of fourth quarter, our N-type capacity exceeded 70 GW, and our cost structure continues to improve. Currently, our mass-produced N-type cell efficiency exceeds 26%, while the integrated cost of N-type is almost on par with P-type. With the continuous introduction of new cell technologies and optimization of cost-reducing processes, our cost structure is expected to become more competitive.

Xiande Li (Founder, Chairman, and CEO)

[Foreign language]

Speaker 10

We attach great importance to intellectual property rights and are fully focused on sustaining our technical leadership based on extensive intellectual property rights. By the end of the fourth quarter, we had been granted 330 TOPCon patents, one of the largest portfolios of granted TOPCon patents in the world.

Xiande Li (Founder, Chairman, and CEO)

[Foreign language]

Speaker 10

With the largest overseas integrated capacity of over 12 GW in the industry and an effective supply chain traceability system, we have become the most reliable module supplier to the U.S. market, which is expected to generate significant profits in 2024. Furthermore, our investment in innovative production model is expected to generate returns over time. Phase one and two of our integrated projects in Shanxi will start production in the first half of 2024 as planned and gradually ramp up in the second half. The full integration of automation can greatly improve labor efficiency and operation turnover efficiency and is expected to bring a significant reduction in operating costs after reaching full production.

Xiande Li (Founder, Chairman, and CEO)

[Foreign language]

Speaker 10

In the mid to long term, the rapid expansion of AI and electric vehicles may lead to tight power supply in the world, and the demand for clean power generation is expected to further increase. So far, reduced solar cost has significantly increased the competitiveness of solar in the energy sector. In the future, solar as a new quality productive force is set to play an increasingly important role in face of energy crisis and energy transformation. We are bullish about PV market growth in the mid to long term, and we are confident we will continue to lead the industry with advanced technologies and premium high-efficiency products.

Xiande Li (Founder, Chairman, and CEO)

[Foreign language]

Speaker 10

Taking into account supply chain and market conditions, we are reducing investments in capacity expansion in 2024. We are focusing on expanding our advanced N-type capacity, including 28 GW of integrated capacity in our Shanxi plant and about 4 GW of N-type cell and module capacity in Vietnam. We continue to focus on improving working capital efficiency and achieving sustainable growth in operating cash flow.

Xiande Li (Founder, Chairman, and CEO)

[Foreign language]

Speaker 10

Before turning over to Gener, I would like to go over our guidance for the first quarter and the full year of 2024. By the end of 2024, we expect mass-produced N-type cell efficiency to reach 26.5%. We expect our annual production capacity for mono wafers, solar cells, and solar modules to reach 120 GW, 110 GW, and 130 GW respectively by the end of 2024, with N-type capacity accounting for over 90% of total capacity. We expect the module shipments to be in the range of 18 GW-20 GW for the first quarter of 2024 and 100 GW-110 GW for the full year 2024, with N-type accounting for nearly 90% of total module shipments. Gener,

Gener Miao (CMO)

Thank you, Mr. Li. Yeah, thank you, Mr. Li. We are pleased to have achieved a historical high in quarterly and annual module shipment thanks to our excellent global marketing network and the power of our product. Total shipments were 27.9 GW in the fourth quarter, with module shipment accounting for approximately 95%. Annual module shipment increased to 76.4% year-over-year to 78.5 GW, and both module shipments in the fourth

quarter and the full year 2024 ranked world number one. We continued to improve product quality and build our customer service network to expand the influence of our brand. By the end of fourth quarter, our accumulated global module shipment exceeded 210 GW, covering more than 190 countries and regions. In terms of geographic mix, China and Asia-Pacific became our major shipment regions in the fourth quarter, accounting for approximately 70%.

For the full year 2023, shipment to Asia-Pacific and North America grew significantly, more than doubling year-over-year. As we continue to expand our footprint in overseas markets and build our integrated capacity, we move on to invest in North America and emerging markets. Based on our business conditions and market trends, China and Europe will continue to be the major contributor to the shipment in 2024, with North America, emerging markets, and Asia-Pacific expected to flourish. On the product front, the competitive high-efficiency Tiger Neo accounted for 70% of the shipment in the fourth quarter, with average premium of CNY 0.10 per watt versus P-type modules. The Tiger Neo accounted for approximately 60% of annual global shipment, achieving the goal we set at the beginning of the year and accelerated its market penetration globally.

Currently, the power output of Tiger Neo modules is more than 30 Wp higher than that of the similar P-type module, providing our customers with higher power generation yield. Shipments of our Tiger Neo were expected to account for over 85% in the first quarter of 2024 and its product strength to continue to lead the industry. We are always committed to bring greater economic value to our customers with high-efficiency, highly reliable products, and sustainable solutions. Recently, we unveiled the first N-type panels produced with renewable energy. These panels were produced in factories that were awarded the Zero Carbon Factory certification by TÜV Rheinland. JinkoSolar is also the first company in the industry to be awarded with Zero Carbon Factory certification by TÜV for silicon in the manufacturing, wafer cutting, cell manufacturing, and module manufacturing. We also continue to improve our ESG practices and optimize our traceability system.

In the first quarter, we were awarded with the ESG Transparency Award from EUPD Research, which recognized our far-reaching commitment to sustainability and transparency. Recently, bidding for some domestic projects began to activate. EU inventories became depleted, and we have seen additional demand, especially in DG business. With gradually improved PV economics and growing demand for transmission to clean energy globally, PV demand in the global market is expected to further increase in 2024, but at a relatively slower pace than in 2023. In longer term, the requirement of AI for computing power will further increase the demand for electricity and electrical equipment, ensuring strong growth potential for PV+ storage. As a responsible global company, we are always committed to providing clients with reliable and highly efficient products and solutions, practicing the values we shared with our clients, partners, and investors to accelerate to a greener future.

With that, I turn the call over to Pan.

Pan Li (CFO)

Thanks to solid execution of our operation and management strategies, as well as successful efforts in cost optimization, we delivered excellent financial performance. For the full year, key metrics such as total revenues, gross margin, income from operations, and net income all significantly increased year-over-year. We also improved working capital efficiency and optimized operating cash flow. By the end of the fourth quarter, we had cash and cash equivalents of $2.75 billion, and our net debt decreased by over 20% year-over-year. In December, we announced the extension of our existing share repurchase program, and by the end of February this year, we had repurchased nearly 1 million ADSs in aggregate amount of approximately $28 million.

With our advantages in N-type TOPCon technology, globalized operations, and integrated capacity, we are very confident in our growth prospect and will continue to improve working capital efficiency and achieve sustainable growth in operating cash flow. Let me go into more details now. Total revenue was $4.6 billion, an increase of 3% sequentially and more than 9% year-over-year. Gross margin was 12.5% compared with 19% in the third quarter and 14% in the fourth quarter of 2022. The decreases were mainly due to the decrease in average selling prices of solar modules. Total operating expenses were $526 million. The increases were mainly attributed to loss of disposal on PPE and expense in relation to settlement of a dispute with customers. Operating margin was 1.1% compared with 2% last year.

Excluding the impact from a change in fair value of the notes and long-term investments and share-based compensation expenses, adjusted net income attributed to JinkoSolar Holding Co, Ltd ordinary shareholders was $65 million compared with $45 million in the fourth quarter last year, up 73% year-over-year. Now, a brief view on our 2023 full year financial results. Total module shipments were 78.5 GW, up 76% year-over-year, and total revenues up 43% year-over-year. For the full year 2023, gross profit was about $2.7 billion, an increase of 55% year-over-year. Gross margin was 16% compared to 14.8%. The increase was mainly attributed to the decrease in the material cost of solar modules. Total operating expenses were $1.8 billion, up 9% year-over-year.

The increase was mainly due to an increase in impairment loss on PPE, an expense in relation to settlement of dispute with customers, and an increase in staff cost. Operating margin for the full year of 2023 was 5% compared to 0.5% last year. Excluding the impact from a change in fair value of notes, long-term investments, and share-based compensation expenses, adjusted net income attributed to JinkoSolar Holding's ordinary shareholders was about $574 million, up nearly 2x year-over-year. Let's move into the balance sheet. As mentioned, at the end of the fourth quarter, our cash and cash equivalents were significantly higher at $2.75 billion, up from $1.93 billion at the end of the third quarter and $1.64 billion at the end of the fourth quarter of 2022. AR turnover days were down to 76 days in the fourth quarter from 87 days in the third quarter.

Inventory turnover days were down to 57 days from 67 days in the third quarter. The total debt was $4.38 billion at year-end compared to $4 billion last year, and net debt was $1.6 billion compared to $2.3 billion last year. This concludes our prepared remarks. We are now happy to take your questions. Operator, please proceed.

Operator (participant)

Thank you. If you wish to ask a question, please press star one on your telephone and wait for your name to be announced. If you wish to cancel your request, please press star two. If you're on a speakerphone, please pick up the handset to ask your question. Your first question comes from Philip Shen with Roth MKM. Please go ahead.

Philip Shen (Managing Director and Senior Research Analyst)

Hi everyone. Thank you for taking my questions. First one is on pricing. I was wondering if you could share with us the Q4 ASP. Sorry if I missed it. And then what do you expect that ASP to be in Q1 and Q2 as we get through the year? Thanks.

Charlie Cao (Director)

Hey, Gener. Would you like to answer a question? Hey, Philip, can you hear me? This is Charlie speaking. Hey, yeah. Okay, Gener, please.

Philip Shen (Managing Director and Senior Research Analyst)

Yes, I can hear you. Please go ahead.

Gener Miao (CMO)

Hey, so I'm traveling, so I didn't get through all of your questions, but I heard it's about pricing, right? So the pricing actually the pricing significant drop happens across December to January. So that means if we compare the ASP between Q4 and Q1, definitely there will be a big gap because of the market price changes. So detail number-wise, I don't have that with me, right? Sorry for that.

Philip Shen (Managing Director and Senior Research Analyst)

Okay. Yeah, hey, Gener. Thanks for that. Can you share what the ASP was in Q4 for modules? And then can you quantify how much lower Q1 might be? Thanks.

Gener Miao (CMO)

Charlie, can you take that? I don't have the number with me now.

Charlie Cao (Director)

Yeah, yeah. Philip, I think the most important thing is we believe it's kind of the panic sales, the module, in recent, let's say, two quarters. And we don't believe the price, particularly in China, is sustainable. And we are expecting, and as well as the market expecting, the module price has been stabilized and maybe up a little bit. And back to the pricing, it's depending on different markets. The U.S. is pretty significant in price premium, and Europe is a little bit better than China. And different segments, DG versus utility has different price difference. But to answer your question, I think you want to explore is for sure, if Q1, Q2 versus Q4 last year, we think the ASP is still in the downward trend, but it's not dramatically, but slightly.

We think it's reaching to the bottom in the first half year of 2024 for the ASP.

Philip Shen (Managing Director and Senior Research Analyst)

Okay. But you have the average selling price for all the regions for Q4, right? Can you share that price for Q4?

Charlie Cao (Director)

No, we don't disclose, but you can calculate the blended if you take the total revenue versus module shipments. Typically, we have, I think, 95% of the revenue is coming from module business.

Philip Shen (Managing Director and Senior Research Analyst)

Okay. Thank you. So it sounds like the bottom could be Q1 or Q2. Or do you think the bottom is more Q2 or more Q1 in terms of module pricing?

Charlie Cao (Director)

I think different company has different mix, but I think it's relatively stable Q2 versus Q1. Maybe a little bit lower, but it's not significant. Yeah, that's what we are looking at. The most important thing is we see that China, the demand is exceeding the expectations. China demands very, very good. Europe, the de-stock has been completed, and they're picking up the stock. So we think there's a kind of improved outlook from the demand side. But still, some oversupply situations. But for Jinko, we have more 90% is N-type and global sales and manufacturing capabilities. And we think we are relatively better than the other peers. But it takes time for the low-efficiency, say, capacity, Tier 2, Tier 3 companies phase out, but it takes time. But we think the most important thing we focus on our adaptiveness throughout the relatively challenging year.

Philip Shen (Managing Director and Senior Research Analyst)

Yeah. Okay. Thanks, Charlie. Shifting over to margins. So you've given us a little bit of a framework for how to think about pricing trends through the year. How do you expect your margins to be for Q1? I know you haven't given official guidance, but just relative to Q4, maybe you can say a little bit up or down or something. And then as it relates to Q2, do you see a bit of a recovery of the margins? Thanks.

Charlie Cao (Director)

Yeah. We estimate the Q1, Q2, first half year, it's a little bit lower, slightly lower versus Q4 last year. It's not dramatic lower for the Q4 versus Q3 last year. It's slightly lower throughout the Q1, Q2. But we believe there's opportunities. And for the second half year, maybe profitability will expand.

Philip Shen (Managing Director and Senior Research Analyst)

Got it. That's very helpful. And then finally, I think in your slides, you talked about 2 GW of integrated U.S. capacity. Again, sorry if I missed this, but does that mean you might do wafer, cell and module in the U.S.? And can you share, if so, what the locations are? And then sorry, I'll leave it there, and I have one follow-up on that topic. Thanks.

Charlie Cao (Director)

Yeah. The U.S. capacity, we started the constructions last year, and it's getting ready. I think we'll work quickly in March or April to start the operation. It's 100% module, 2 GW, no wafer sale. But we have integrated capacity in Southeast, Vietnam, Malaysia, the capacity is roughly 12 GW-14 GW. And in the combinations with the 2 GW, the module capacity in the U.S., I think we are in a good position. And on top of that, we have separate independent supply chain from the poly everything to the module. And we have very good traceability systems and proof record, right, in the last year. So we think this year is we have more market opportunities to catch up for the next two or three years for the U.S. market.

Philip Shen (Managing Director and Senior Research Analyst)

Got it. Okay. So it's only 2 GW of module or it is 2 GW of module. The way it was written on the slide, slide six, it sounded like 2 GW of integrated capacity could be in the U.S. But my follow-up here, and then I'll wind it down, is what is and this might be a bit of a tough question, but what is your view of the discussion around the Foreign Entity of Concern language, which a lot of people are talking about could be added to the 45X manufacturing PTC, which might make it more difficult for you guys to add or to receive the PTC? You're ramping up your facility basically now, if not maybe in a month, in April. To what degree does that concern you? Are you following that topic at all? Thank you.

Charlie Cao (Director)

Firstly, I'm not familiar with the topics you are talking about, the foreign entities, the regulations updates, but we will follow up after the call. But I think I'm not sure you're talking about the semiconductor, the sensitive technology, but we think solar is more pervasive and very common for each country to develop. And it's not data-sensitive. But anyway, we will follow up the topic you are talking about, but not familiar with the progress.

Philip Shen (Managing Director and Senior Research Analyst)

Okay. Thank you, Charlie. I know I asked a lot of questions. Appreciate it. We'll pass it on.

Operator (participant)

Thank you. Your next question comes from Alan Lau with Jefferies. Please go ahead.

Alan Lau (Managing Director and Senior Equity Research Analyst)

Thank you for taking my questions. So I would like to know because there's a very detailed capacity expansion plan, and just would like to ask a bit on the details. So by the end of 2024, it would be 120 GW and then 110 GW and 130 GW for wafer cell and module. So my question is mainly on the cell because the company has 70 GW of TOPCon by the end of 2023. And then supposedly, the remaining 20 GW is PERC. And then by the end of this year, it's 110 GW. So will it be 100 GW of TOPCon plus 10 GW of PERC? If that is the case, then do you mean you would impair the 10 GW of PERC this year?

Charlie Cao (Director)

The answer is we will phase out 20 GW of the PERC capacity throughout the year. That's the plan. And we have everything we have discussed by the end of the year, the capacity is 100% N-type. It's not no P-type capacity. The cell capacity is 110 GW. And the major part is the 28 GW, the Shanxi super factories, plus what we are talking about, the Vietnam, 4 GW. As well as we have some improvement of production, the volume, existing capacity. So total is 110 GW for the N-type TOPCon capacity. We did have 28 GW PERC capacity, and we don't have plan to upgrade. And we think it's not economic makes sense. And the most important thing is we have depreciated the capacity over five years. So we don't believe we have significant burden for the 20 GW, the PERC.

We focus on the technology and the new technology and new PERC. I think that is the smart decision.

Alan Lau (Managing Director and Senior Equity Research Analyst)

I see. So just to confirm, basically, for the 20 GW of PERC, they are fully depreciated. So basically, they were built in 2019, and then by now, they are fully depreciated. So you do not see major impairment risk this year, right?

Charlie Cao (Director)

Yeah. It's roughly, yes. We did have some kind of residual value, but it's not significant. Most of the assets have been depreciated.

Alan Lau (Managing Director and Senior Equity Research Analyst)

Yes. Yeah. That's impressive because a lot of peers in this industry might have a lot of impairment this year. So my next question is, what is the new signed ASP for the contracts that you are signing in the U.S. market? Because I have been hearing different feedback saying that prices for utility projects in the U.S. are declining from $0.30 to below $0.30 since 4Q. So I'd like to learn your view on this front.

Charlie Cao (Director)

Yeah. There's kind of, I think, spot index for the U.S. The price range is relatively, I think, relatively big, high $0.20-low $0.30, what kind of in our range. And it looks like it's in the downward trend, but relatively stable. And the different customer has different preference. And we think we are in a good position because we traceability, and we have separate poly through the modules. And we think we can sell relatively the price premium with some peers.

Alan Lau (Managing Director and Senior Equity Research Analyst)

Thanks. So you have mentioned overseas polysilicon. So we'd like to have an update on the overseas polysilicon price. Is it rebounding, or it's still trending down?

Charlie Cao (Director)

I think in the recent three months, it's relatively stable because the polysilicon, the out of China is around 100,000 metric tons. It's no new capacity expected in the next one and a half year. But the other thing is maybe some China poly through the but I think there's a relatively risk. And there's a very complicated compliance. And so we don't see significant downward and relatively stable.

Alan Lau (Managing Director and Senior Equity Research Analyst)

I see. I see. So, switching gears to the European market because you have mentioned destocking has basically completed. So, we'd like to follow up on this. Are you receiving orders in a normalized manner? What about how is it from the residential market, or is it mainly from the utilities market in Europe?

Charlie Cao (Director)

I think both. But in the recent quarter, I think the majority is the DG and the market. But we think this year, both utility and the DG will grow year-over-year.

Alan Lau (Managing Director and Senior Equity Research Analyst)

You don't see inventory as an issue even in the DG market anymore because last year, it was a huge issue?

Charlie Cao (Director)

Yeah. Yeah. And last year, the first half year is built the stock, right, for the DG distributors and destock through, I think, five or six months. And it looks like on top of that, not only in the European market as well as other markets, the customers, they are waiting to the bottom of the module price. But it looks like stabilized, I think the price is not sustainable. A lot of customers accelerate the purchase decisions. As well as the destock, the stock level is going back to normalized level in Europe. And plus the logistic issue, right? Let's see issues. So we see the rebound from the European market. And the second quarter, pretty sure, is a strong quarter for the European market.

Alan Lau (Managing Director and Senior Equity Research Analyst)

Sure. In your Q4, I think it's the first time that you have officially put ESS into the whole press release. So we'd like to know, do you have any quantitative shipment target on ESS? Because I know you have capacity for more than 10 GWh. So we'd like to know on that front.

Charlie Cao (Director)

Oh, storage. Oh, storage. We built up the capabilities, the teams, products, capacities, and the majority from last year. The key focus is we develop our R&D capabilities and products and focus on some key markets. So far, it's in the relatively early stage. But we are confident, and we will discuss maybe the full year, the guidance, and later this year, maybe in the second quarter, third quarter. This year, we think it's a good opportunity to catch up the markets and build a strong foundation for the next few years. So that's the key focus, not the focus for the shipment this year.

Alan Lau (Managing Director and Senior Equity Research Analyst)

Thanks. Thanks a lot for the comprehensive information. I'll pass on. Thank you.

Charlie Cao (Director)

Thank you.

Operator (participant)

Thank you. Once again, if you wish to ask a question, please press star one on your telephone and wait for your name to be announced. Your next question comes from William Grippin with UBS. Please go ahead.

William Grippin (Director of Equity Research)

Excellent. Thank you very much. My first question was just on your 300+ patent portfolio. I was wondering if you could provide a little more color on where those patents are granted. Are any of them international? And one of your peers is out there asserting their IP rights related to some TOPCon technologies. Just maybe how are you thinking about that? How do you view that relative to your patent portfolio? Thank you.

Charlie Cao (Director)

The patents and we put a lot of R&D efforts in the recent couple of years. And we developed and discussed, right, over 300 TOPCon patents, which we developed ourselves. On top of that, we have additional more TOPCon patents by acquisition from others. And the patent is our key differentiators and the key strategies. And we licensed to one of the top 10 module companies and one of the top five solar cell companies. And it's illustrating how we're strong and capable, our R&D teams, on the cutting-edge technology.

William Grippin (Director of Equity Research)

Okay. Yeah. Appreciate that. And then just on the 26% mass production N-type cell efficiency that you referenced in the press release, how do you expect that to translate into mass production module efficiency? And when do you think that would ultimately be realized in mass production? Thank you.

Charlie Cao (Director)

26% cell capacity, we have reached to that level, the mass productions. Our target is end of this year, 26.5%.

William Grippin (Director of Equity Research)

All right. Appreciate the time. Thank you.

Charlie Cao (Director)

Sorry. Good job. Good job. Yeah. Sorry. Sorry. And I think that for the standard, the 182, I think we are targeting roughly 610 W to maybe 620 W for standard 182 modules. Yeah.

Operator (participant)

Thank you. Once again, if you wish to ask a question, please press star one on your telephone and wait for your name to be announced. Your next question comes from Rajiv Chaudhri with Sunsara Capital. Please go ahead.

Rajiv Chaudhri (Founder and President)

Yes. Good morning. I have a few questions. First of all, just in terms of housekeeping, can you tell us what the depreciation number was in the fourth quarter and what you expect it to be in 2024?

Charlie Cao (Director)

So sorry. Could you repeat again?

Rajiv Chaudhri (Founder and President)

Yes. The question was about depreciation in the fourth quarter and what the expectation is for 2024.

Charlie Cao (Director)

Oh, depreciations. It's roughly, I think, CNY 6 billion-CNY 7 billion for 2024. So each quarter, roughly, I think, CNY 1.5 billion-CNY 1.8 billion.

Rajiv Chaudhri (Founder and President)

Sorry. Can you repeat that? CNY 1.5 billion-CNY 1.8 billion?

Charlie Cao (Director)

RMB. Yes. Depreciations. Yeah.

Rajiv Chaudhri (Founder and President)

That's in 2024. What about the fourth quarter?

Charlie Cao (Director)

Last year, right?

Rajiv Chaudhri (Founder and President)

Yes. 2023. Yes. Sorry.

Charlie Cao (Director)

Yeah. Similar. Similar amount. It's not significantly different.

Rajiv Chaudhri (Founder and President)

Around CNY 1.5 billion in the fourth quarter?

Charlie Cao (Director)

Yeah. Roughly.

Rajiv Chaudhri (Founder and President)

Okay. And then what was the total CapEx, capital spending in 2023, and what is the expectation for 2024?

Pan Li (CFO)

For CapEx? Yeah. Let me go into some details. For the 2023, our total CapEx is around CNY 18 billion. We expect a range in 2024 is from CNY 11 billion-CNY 15 billion. Depends on the market.

Rajiv Chaudhri (Founder and President)

I see. Okay. And out of this CNY 11 billion-CNY 15 billion, is it almost 100% related to the module business, or is there anything related to the storage business as well?

Pan Li (CFO)

It's related to our integrated solar manufacturing.

Rajiv Chaudhri (Founder and President)

Okay. The next question is about the charges that you had in the operating expenses. You mentioned that the write-down of assets as well as the settlement with the customer, if they had not happened, then the total operating expense would have been the same as the third quarter. So by my calculation, that is about CNY 60 billion or about $85 million. Is that? Sorry, CNY 0.6 billion or about $85 million. Is that the correct number?

Charlie Cao (Director)

Hey. So Rajiv, you're right. We did have some kind of special one-time items in the fourth quarter last year. One is, I think, some kind of customer disputes. It's around the $30 million, $30 million, which is we have some impairment for the equipment around $10 million. So we did have $40 million. I think it was one-off items you can exclude.

Rajiv Chaudhri (Founder and President)

I see.

Charlie Cao (Director)

Not recurring items. Yeah.

Rajiv Chaudhri (Founder and President)

Okay. Comparing your cost structure to the Tier 2 manufacturers, can you give us an idea? My calculation is that your cost structure in the fourth quarter was about 10 percentage points better than the Tier 2 and Tier 3 manufacturers. So for example, if you did 12.5% gross margin, the Tier 2 and Tier 3 were operating at 2%-3% gross margin. Can you comment on that?

Charlie Cao (Director)

We're confident our cost structure is leading, and we have advantage. By the way, we don't comment on detailed numbers. Different companies have different situations. But you're right. But if we are, let's say, making low profit levels, I think a lot of companies doing a similar business will lose their money. We're very confident. But again, I think it takes time to phase out the Tier 2, Tier 3 companies. And it's after the consolidation and phase out, and we think we can get more market share and make decent profitabilities. But it takes time.

Rajiv Chaudhri (Founder and President)

Do you think at this point, your cost structure is better than other Tier 1 manufacturers?

Charlie Cao (Director)

I don't do 100% guarantee, but we are confident.

Rajiv Chaudhri (Founder and President)

So you're confident that your cost structure is already equal to or better than other Tier 1 manufacturers?

Charlie Cao (Director)

Yeah. We are confident that our cost structure, capacity, technology is leading. Yeah.

Rajiv Chaudhri (Founder and President)

Can you elaborate on the expected cost improvements that are likely to happen as a result of the integrated production that you're going to roll out next year of the Shanxi plant? How much of a cost advantage are you going to create as a result of the integration and everything happening in one location?

Charlie Cao (Director)

Yeah. It's not purely cost advantage. It's the Shanxi super factories. It's digitalized and automatic. And the ESG traceability is low carbon, everything. And we integrated a lot of advanced equipment and streamlined a lot of the even phased out some production phase, stage, and have significant workforce efficiency and very high turnover ratios and very good positioning locations to serve the customers in the West China as well as the global market customers. So the cost structure, it's reflecting the advantage. And it's a big amount, we believe, but we don't disclose. But we think it's a big advantage versus the existing production structures for the industry.

Rajiv Chaudhri (Founder and President)

Finally, I want to confirm a number that I think Gener gave. The total volume of shipments of N-type in the fourth quarter, was it 70% of total shipments?

Charlie Cao (Director)

Just a moment. That's 70%. Yes. 70%.

Rajiv Chaudhri (Founder and President)

Did he say that in the first quarter, it'll be 85%?

Charlie Cao (Director)

So four year. Let's say it's four year. It's around 90%. So gradually from 70%-95% quarter by quarter and this year. So Q1 this year, I think, is roughly 80%.

Rajiv Chaudhri (Founder and President)

Okay. Okay. So going back to the gross margin, so you are suggesting that the first quarter gross margin should be slightly lower than the fourth quarter. So are we still looking at a number around 12%?

Charlie Cao (Director)

You mean the absolute number?

Rajiv Chaudhri (Founder and President)

Yeah. The actual gross margin?

Charlie Cao (Director)

Yeah. We don't disclose that. But I said it's slightly downwards, but not dramatically. But we think it's the bottom, and it's reaching the bottom. Yeah. For the first half year.

Rajiv Chaudhri (Founder and President)

If the gross margin is around 12% in the first quarter and the prices stabilize from March, April onward, is it reasonable to think that gross margin could improve in the second quarter because your costs will keep on coming down and also your shipments to the U.S., which are higher ASP, will go up?

Charlie Cao (Director)

We think we have more likelihood to improve in the second half year, the input outlook, the demand outlook. You're talking about U.S. shipments. It's the second half year lowest. And I think roughly maybe, let's say, 65% shipments in the U.S. in the second half year. As well as the Shanxi super factories is doing the pilot productions the first half year, but will be 100% operational by the end of the third quarter. So everything together, we think it's the margin, the expansion is likely in your second half year.

Rajiv Chaudhri (Founder and President)

What do you think the impact of you mentioned that by the fourth quarter, you expect that Tier 1 companies or top 10 manufacturers will have as much as 90% of the market? That basically means Tier 3 will have shut down, and Tier 2 will be selling much lower output than they are selling right now. What do you think that does to pricing by the fourth quarter?

Charlie Cao (Director)

The fourth quarter this year, right?

Rajiv Chaudhri (Founder and President)

Yes.

Charlie Cao (Director)

Yeah. It's difficult to estimate, but I think they should be stabilized. And the most important things, I think by the end of the fourth quarter, I believe a lot of industry players for Tier 2, Tier 3, and as well as the companies, they never in the solar industry but entered in addition one or two years. Those

guys are going to the capacity will be phased out 100%. So that's my estimation. Yeah.

Rajiv Chaudhri (Founder and President)

Okay. Great. Thank you very much. Good luck in 2024.

Operator (participant)

Thank you.

Charlie Cao (Director)

Thank you.

Operator (participant)

There are no further questions at this time. That does conclude our conference for today. Thank you for participating. You may now disconnect.