

Abalance

3856

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■ Summary

4.2-fold increase in amount of sales and a 17.2-fold gain in ordinary income year-on-year (YoY) in 1H FY6/23; Announcement of further upward revision of full-year results and medium-term management plan; Embarking on a new 6GW solar cell plant project after having established the fourth plant

Abalance Corporation <3856> (hereafter, also “the Company”) in the Abalance Group is a comprehensive renewable energy company that is promoting ESG and SDGs. In the realm of mainstay solar power generation, the Group conducts every aspect of operations, from planning and development through to construction, sales, maintenance, electric power sales and recycling. It has been expanding its business scope, having made Vietnam-based manufacturer of solar panels Vietnam Sunergy Joint Stock Company (hereafter, “VSUN”) a specified subsidiary in November 2020. VSUN’s annual production ranks among the top in global rankings and is the highest among Japanese companies. Meanwhile, demand for solar panels is expected to keep driving consolidated results going forward given that such demand has been escalating at a pace far greater than anticipated. Whereas VSUN is currently undergoing registration screening with respect to the public company system in Vietnam looking toward listing its shares on the nation’s UPCoM over-the-counter market, other options are being considered including that of listing its shares on other foreign securities markets given that the small size of the Vietnamese market makes it difficult to attract growth funds.

1. Outline of results for 1H FY6/23

In the 1H FY6/23 consolidated results, sales and profits increased significantly with amount of sales having climbed 320.5% YoY to ¥112,071mn and operating income having gained 870.5% to ¥5,167mn. In the Solar Module Manufacturing Business, amount of sales gained 368.7% to ¥107,441mn, mainly driven by sales to Europe and the United States. Segment income also increased significantly to ¥4,612mn (¥223mn in the same period during the previous fiscal year) as a result of price hikes made in response to soaring prices of parts having taken hold and lower maritime shipping costs. In the Green Energy Business, amount of sales increased 22.3% to ¥4,425mn amid a gain in revenue from electric power sales brought about by the Company’s own development and M&A effects, and segment income achieved strong performance up 50.6% to ¥932mn.

2. Outlook for FY6/23

The forecasts for the FY6/23 consolidated results have been revised upward for a second time. The Company expects amount of sales to increase 89.3% YoY to ¥175,000mn and operating income to gain 312.3% to ¥7,000mn (initial forecast was for the amount of sales of ¥110,000mn and operating income of ¥2,900mn). This is primarily attributable to significant growth in demand for solar panels and better-than-expected improvement in profit margins. FISCO deems this forecast to be conservative with significant upside potential. This is largely attributable to factors that include: the Company has achieved 64.0% and 73.8% of its projected amount of sales and operating profit, respectively, up through 2Q with respect to the revised forecast; VSUN’s fourth solar panel module plant is now fully operational upon its completion in October 2022, thereby expanding its annual production capacity to 5.0GW from 2.6GW previously, and; the Company anticipates heightened profitability amid expectations that in 2H it will again encounter positive effects of price hikes and lower ocean freight rates. Although the fourth plant has been in full operation since January 2023, the financial impact associated with such full operation has not been factored in to the second revised forecast due to certain difficulties inherent in making rational projections given the short duration of time since the plant’s launch.

Summary

3. Further upward revision of the medium-term management plan and key initiatives

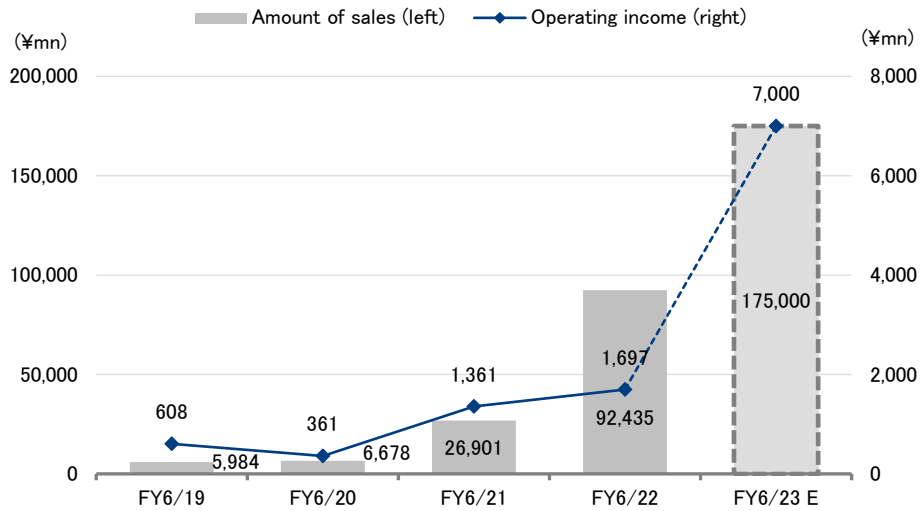
In September 2022, the Company upwardly revised its three-year medium-term management plan effective through FY6/24 as announced in October 2021, given very strong results of VSUN. In February 2023, the Company announced a second upward revision given a situation where the prevailing scenario exceeds its expectations. The Company has increased its FY6/24 targets, with that for amount of sales raised by ¥101.8bn relative to the previous target to ¥251.8bn and that for operating income heightened by ¥11.3bn to ¥15.8bn. The upward revision is mainly attributable to the favorable performance of the Solar Module Manufacturing Business. Accordingly, the Company plans to complete construction of a new solar cell plant with 3GW annual production capacity (investment of approx. US\$180mn) in October 2023 under the first phase of the project, and will subsequently initiate mass production (plans for ultimate expansion to 6GW). Whereas solar cells have been procured externally thus far, the Company's aims in shifting to mass production of solar cells are such that: the Company anticipates higher profit margins by enlisting production integrated from solar cells to modules; the shift will help ensure a consistent supply of materials by bringing production in-house, and; the shift will involve establishing a framework for addressing import regulations in respective nations (such as restrictions on importing solar panels consisting of Chinese-made parts). It should be noted that effects of improved profit margins brought about by a shift to mass production of cells has not been incorporated into this second revision. With the Company having set a 1GW operational target (domestic and overseas total) to be achieved by the year 2030, the Green Energy Business will seek to accelerate business through M&As while also engaging in solar self-consumption projects (Non-FIT and non-firm), etc., as one of its key initiatives.

Key Points

- Is a comprehensive renewable energy company whose main businesses are the Green Energy Business and the Solar Module Manufacturing Business, while VSUN's solar module panel manufacturing capability (5GW) is top among Japanese-affiliated companies
- In 1H FY6/23, poised to achieve substantially higher sales and profits due to significant growth in the Solar Module Manufacturing Business
- The FY6/23 forecast has been upwardly revised for a second time, but remains conservative with upside potential
- The FY6/24 earnings results targets have been upwardly revised for a second time, but there is potential for further upside due to effects of better profit margins amid a shift to mass production of cells

Summary

Results trends



Source: Prepared by FISCO from the Company's financial results

Company profile

From an IT company to a comprehensive renewable energy company

1. History

The Company was established in April 2000 as an IT company in order to develop and manage internet services and to provide knowledge management solutions to companies. In September 2007, it was listed on the TSE Mothers market (currently listed on the TSE Standard Market). Meanwhile, in seeking to expand its operations as a comprehensive renewable energy company, the Company made WWB Co., Ltd., which engages in purchasing and sales of construction machinery and the green energy business, a wholly owned subsidiary through an exchange of shares in November 2011.

In particular, the Company added VSUN, a major manufacturer of solar panel modules in Vietnam, as a consolidated subsidiary of the Group, upon having made a consolidated subsidiary of its equity-method affiliate FUJI SOLAR Corporation in November 2020. The Company consequently achieved substantially higher consolidated results. In the Green Energy Business, The Company has also been actively engaging in M&As, including those involving companies operating solar power plants, in order to expand the electric power sales business as a stable source of earnings. In addition, the Company successively established the entities; PV Repower Corp. in seeking to enter the solar panel reuse and recycling market, and Birdy Fuel Cells LLC in seeking to develop a hydrogen energy storage system.

Company profile

Abit Corporation, which serves as a subsidiary in charge of the IT Business, made a subsidiary of Digital Sign Co., Ltd., which has strengths in electronic authentication technologies. Meanwhile, the Company conducted a tender offer involving the shares of Meiji Machine Co., Ltd.<6334> and made it an equity-method affiliate at the same time as concluding with it a capital and business partnership agreement. Meiji Machine is the largest company in the powdering equipment industry and has an extensive customer base in the agricultural field. It engages in initiatives that entail strengthening sales of solar sharing systems (farm-type solar power generation systems), increasing sales of machinery for the entire Southeast Asia region, utilizing photocatalysts for safe and hygienic operations of pig and poultry farms, and otherwise offering high-value proposals to all of its customers involved in the food sector by accelerating the creation of synergies and collaborative sales in a manner that leverages strengths of both groups in areas beyond photocatalysts.

The Company's major subsidiaries also include VALORS Corporation, which conducts business entailing lot sales of solar power plants, and Japan Photocatalyst Center Corporation, which develops, manufactures, and sells photocatalytic titanium oxide coating agent and related products. As of December 31, 2022, Abalance has 341 employees in Japan (including affiliated companies) and 1,500 employees overseas (VSUN). Whereas the Company is listed on the Standard Market accompanying reorganization of the Tokyo Stock Exchange (TSE) market categories in April 2022, it aims to be listed on the Prime Market at an early stage given that such listing will strengthen its ability to recruit human resources and improve its enterprise value in the medium to long term.

Takes an ESG perspective and contributes to a sustainable society (SDGs) in the decarbonization field

2. Initiatives for ESG and SDGs

The Company intends for the Green Energy Business to help realize a sustainable decarbonized society, so it is developing it alongside the trends in SDGs. By 2030, it is targeting owning power plants with a power generation capacity of 1GW (equals 1,000MW, which corresponds to the power generated by one nuclear power plant) as the total of its domestic and overseas power plants, and it intends to contribute to a reduction in CO₂ in order to prevent global warming. By progressing the Green Energy Business, it can be seen to make a contribution to SDG No.7 (Ensure access to affordable, reliable, sustainable and modern energy for all), SDG No.11 (Make cities and human settlements inclusive, safe, resilient and sustainable), and SDG No.13 (Take urgent action to combat climate change and its impacts). In the overseas business, starting with VSUN's Solar Module Manufacturing Business, the Group is involved in multiple projects to respond to demand for electric power in Southeast Asian countries. The delivery of green energy to these areas has significance as an important international contribution on the points of supporting the region's infrastructure and societal living. There are some environments that are located away from urban areas that become dark when the sun goes down, and the Company has explained that it wants to deliver light through green energy to these regions. Initiatives for ESG are in line with the Abalance Group's philosophy and it is actively incorporating an ESG perspective into its management strategy, as well as appointing SDGs experts as outside directors. Moreover, the Company also takes part in the Nikkei Decarbonization Project sponsored by Nikkei Inc. in supporting the core concept of facilitating achievement of a low-carbon society.

Company profile

WWB develops solar sharing systems capable of simultaneously engaging in agricultural business and power generation business, thereby serving as a solution in terms of contributing to stabilization of agricultural management, development of business successors, and elimination of idle farmland. Solar sharing, which enlists an approach that involves setting up pillars on farmland and installing solar power generation facilities at above-ground spaces, is positioned as a business warranting focus going forward. Also, in recent years there has been frequent wind and rain damage due to large-scale typhoons and alongside this, power cuts have also occurred. In response to this, it has developed and is selling Rakudenkun, which is a portable battery comprised of an optimal set of folding lightweight modules that can be used by households as a power supply at the time of a disaster. Inquiries are increasing in preparation for times of need, such as from local governments that are working on disaster measures, while the Company also donated it to Hitoyoshi City in Kumamoto Prefecture, Kobayashi City and Ebino City in Miyazaki Prefecture, Kakuda City in Miyagi Prefecture, and Motomiya City in Fukushima Prefecture.

Solar sharing case study



Source: The Company's materials

The portable battery developed in-house



Source: The Company's press release

In addition, following the accident at the Fukushima Daiichi Nuclear Power Plant due to the Great East Japan Earthquake in March 2011, it collaborated in the donation of a large-scale concrete pump vehicle (common name: the large giraffe) manufactured by SANY*. Currently, WWB still provides services free of charge, including maintenance work and exchanges of parts.

* SANY is a Chinese global construction machinery manufacture that competes with companies including Caterpillar Inc. of the US and Komatsu Ltd.<6301>. WWB is its official agency in Japan.

Company profile

Collaborated to donate a concrete pump vehicle to the Fukushima Daiichi Nuclear Power Plant



Note: the 62-meter pump vehicle was transferred from the Port of Shanghai to Fukushima with the permission of the Japanese government due to height restrictions in Japan.

Source: The Company's materials

A comprehensive renewable energy company whose two business pillars are the Green Energy Business and the Solar Module Manufacturing Business

3. Business description

The Abalance Group is a comprehensive group of renewable energy companies whose main businesses are the Green Energy Business and the Solar Module Manufacturing Business. It conducts the IT Business, Photocatalyst Business, and Construction Machinery Business, and it is leveraging unique synergies.

(1) Green Energy Business

The Abalance Group provides unified, vertically integrated-type one-stop solutions for solar power generation, from planning and development through to construction, O&M*1, and recycle. This constitutes a strength of Abalance given that few companies have manufacturing function within their own supply chains. In recent years, with the aim of strengthening a stable earnings foundation through a stock (recurring income) type business model, it has worked to increase revenue from electric power sales through owning its own power plants. In addition, as overseas business, it conducts businesses including purchasing and sales of solar panels and related products (power conditioners (hereafter, "PCS"), storage batteries, etc.) and solar power plant sales (including pre-owned projects). It is also conducting other businesses, including an EPC business*2 and an IPP business*3, including by establishing joint ventures with local companies in areas where energy demand is strong, such as in the Southeast Asia region and Taiwan.

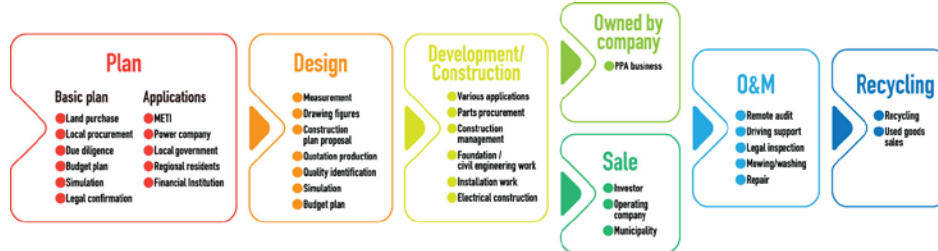
*1 O&M (Operations & Maintenance): maintenance and management services for solar power generation facilities, etc. It includes ascertaining and monitoring daily power generation conditions, including from data analysis; maintaining equipment performance through regular inspections; the early detection of accidents; and replacing parts and equipment in a timely manner.

*2 An EPC business is a business for the outsourcing of construction work projects that includes E (Engineering), P (Procurement), and C (Construction).

*3 An IPP (Independent Power Producer) business refers to a business of conducting wholesales to electric power companies of the electric power generated by a company's own power generation facilities.

Company profile

Green energy business model



Source: The Company's website

The Group's customers include domestic and overseas IPP businesses that own solar power plants, companies conducting wholesales of household-use solar panels and related products, general business companies, and public organizations (such as those installing solar panels). The solar panels are sold under the Group's own Maxar brand. The performance and price of Maxar brand panels is comparable to the panels of major manufacturers and its lineup also includes products that are superior in terms of conversion efficiency. It procures PCS from a highly reliable major manufacturer, while its in-house development team jointly develops storage batteries with a major manufacturer. The power plant development areas are in almost all areas of Japan, from Hokkaido and Tohoku to the Kanto area, mainly Chiba, and also the Kinki and Kyushu areas.

Kakuda City Solar Power Plant
(WWB development)



Kunisaki Solar Power Plant
(VALORS development)



Source: The Company's materials

In addition, in the storage battery business as well, the Company launched industrial and home-use storage batteries. It is a pioneer in this area and developed itself the Rakudenkun portable battery, which is a set of lightweight, foldable modules, selling from October 2019. PV Repower is in charge of a reuse and recycling business to contribute to solving the solar panel waste disposal problem. Moreover, it also newly established Birdy Fuel Cells as a global innovation company with the goal of levelling-out intermittent green energy, and this company is working on the development of a hydrogen energy storage system that is expected to be a new energy of the future.

In the overseas business, WBB has a track record of development in nations that include Vietnam, Cambodia, Indonesia, Sri Lanka, Bangladesh, and Taiwan, etc. A recent example is that of its installation in June 2022 of roof-type solar power generation facilities (panels manufactured by VSUN, power generation capacity corresponding to 1MW) at Da Nang Mikazuki Japanese Resort and Spa (Vietnam), a multi-complex resort operated by the Hotel Mikazuki Group. Although the overseas business has been stagnant since 2020 due to the novel coronavirus pandemic (hereafter, "COVID-19"), the Company has had its sights set on aggressive expansion in areas including regions subject to strong demand such as South America and Africa.

Company profile

(2) Solar Module Manufacturing Business

VSUN, which runs a solar module manufacturing business, was established in June 2015 as a subsidiary of FUJI SOLAR. It has developed while acquiring the expertise of Japanese engineers and it has grown to the extent that today, it has an annual production capacity of 5.0GW*. Its production volume is top ranked globally and it is top class among major Japanese-affiliated companies. When it first launched the business, it exported mainly to Europe, but in recent years it has expanded exports to the United States as well and has been growing rapidly.

* Completed in October 2022, the fourth plant increased annual production capacity of solar panel modules to 5.0GW, from 2.6GW previously.

Underpinned by its expanded production capacity available upon completing VSUN's fourth plant, the Company will undertake capital investment for constructing a solar cell plant in Phu Tho Province, Vietnam, with the aim of shifting production of N-type TOPCon cells that serve as a primary component of solar panels to in-house production from external procurement currently. With cells slated for production intended mainly for use in VSUN's solar cell manufacturing, the Company seeks to reduce costs by vertically strengthening its supply chain upstream and shifting to in-house production with respect to primary components. The Group aims to fortify its global marketing with its sights set on overseas sales.

VSUN's products are manufactured on an advanced automated production line based on a quality control system originating in Japan, and they have been highly evaluated by external evaluation organizations both for quality and reliability. Specifically, in the APAC Business Awards held by APAC Insider, a UK global media company, it won the Best International PV Solar Manufacturer-Asia Pacific Award (announced on January 20, 2022). Also, PV Evolution Labs, which is an organization that tests the reliability and performance of solar modules, the same as in the previous year it certified it as one of the "top performer" companies in its PV Modules Reliability Scorecard (2022 edition), which is its report summarizing the results of testing on module reliability (announced on May 30, 2022). Moreover, per evaluation performed by EcoVadis (France), a globally recognized CSR and sustainability assessment organization that focuses on supply chains, VSUN was awarded the Bronze Medal for the second consecutive year (announced January 2023), having ranked 64th out of more than 75,000 participating companies worldwide. Under the EcoVadis evaluation scheme, a supply chain that has been assigned a score at no less than a certain level is granted a social evaluation indicating an absence of exceptional risk. In recent years, EcoVadis evaluation results have come to be widely used not only in Europe and the United States but also in Japan for supplier contract risk management in purchasing departments.

Whereas VSUN is currently undergoing registration screening with respect to the public company system in Vietnam looking toward listing its shares on the nation's UPCoM over-the-counter market, other options are being considered including that of listing its shares on other foreign securities markets given that the small size of the Vietnamese market makes it difficult to attract growth funds.

Looking at VSUN's current capital configuration, it is owned indirectly through FUJI SOLAR (51.0% stake), which is WWB's subsidiary, and the actual ownership ratio is approximately 43% and the remainder is non-controlling interests. But the Company's policy is to continue to maintain it as consolidated subsidiary even after it is listed.

Company profile

(3) IT Business

The IT Business provides various services, including KnowledgeMarket® by the subsidiary Abit, which is an information sharing and knowledge management tool to support improved work efficiency in companies, a DX support service that utilizes Microsoft 365, and also other services that use RPA products to improve efficiency and to save labor. In addition, Digital Sign became part of the Group in March 2022. It develops systems and also develops and provides services that utilize its strengths in data security technologies. Beginning in June 2022, it also embarked on the business of IT recruitment services business. Going forward, Digital Sign intends to expand its mutual value chain and grow its business.

(4) Photocatalyst Business

The Photocatalyst Business is mainly the business of the subsidiary Japan Photocatalyst Center, which primarily manufactures and sells a photocatalytic titanium oxide coating agent and the products that use it. Photocatalyst refers to a process in which when applying light energy, such as sunlight or fluorescent light, to the agent, oxidative decomposition by a catalytic reaction occurs on the surface of the object to which the agent is applied, which has the effect of degrading and removing harmful microorganisms and chemicals. Utilizing this principle, applying the photocatalytic titanium oxide coating agent to the target object makes possible various effects, including an antifouling function, an air cleaning function, air purification, a deodorizing function, measures to counter sick house syndrome, and also antibacterial, antifungal, and antiviral functions.

(5) Construction Machinery Business

WBB’s business involving sales and rental leases of construction machinery in Japan and Southeast Asia is included under the Others segment, which is in addition to the main business segments. A strength is that it handles used machinery, and it is the official agency of SANY of China, a global construction machinery manufacturer, and of SUNWORD. Its customers include domestic and overseas construction companies, civil engineering companies, logistics-related companies, and import-export sales companies. In recent years, it acquired an order from a Japanese general contractor company entering-into Southeast Asia for an ODA project, and it is also progressing collaborations between businesses, including the use of machinery at the construction sites of solar power generation projects. WWB, has delivered three top lifters to the Oi. Container Terminal (CT) No.5 at Tokyo Harbor, and going forward, it plans to continue responding quickly to port-related demand.

A top lifter manufactured by SANY



Delivery of a top lifter



Source: The Company’s materials

Has manufacturing bases overseas and a strength is that provides one-stop solutions globally

4. The Abalance Group's strengths

(1) Formation of a global supply chain and a one-stop solution

Solar power generation has a wide base and a long supply chain, so in the industry it is difficult for a single company to prepare a full set of power generation facilities. In this situation, the Company has acquired solar panel manufacturing and sales functions by making VSUN of Vietnam a specified subsidiary. This enables it to provide a one-stop solution, from planning through to procurement of power generation equipments, design and construction contract work, operations and maintenance, and recycle, making it a comprehensive group of renewable energy companies. Even if disturbances occur in the international supply chain, as it has a manufacturing function it can be said to have a competitive advantage for securing solar panels compared to other companies. Moreover, the Company has embarked on efforts to establish a new solar cell plant handling primary components with the aim of strengthening its supply chain upstream.

(2) Provision of high-quality modules with respect to Vietnamese plants (VSUN)

EcoVadis of France awarded VSUN the FY2022 Bronze Medal for having ranked at the top among Japanese companies in terms of its annual panel production capacity. This is testament to the notion that panels manufactured by VSUN have been recognized as a Japan brand in having received high marks for everything from solar panel planning and design, to procurement, manufacturing at each step of the process, the series of process for product inspection and related tasks, and business performance.

(3) A revolving cycle of sustainable investment

The revenue from electric power sales from the solar power plants that are owned by the Company in order to secure stable revenue from sales of electric power is expected to continue growing in the future as the number of power plants owned by the Company is increased. Also, management fees from O&M (it has a management track record of more than 1,000 projects in total) will become a stable source of earnings in the medium to long term. Using the cash flow generated from these businesses as the source of funds, the Company will be able to develop new power plants, conduct M&A, and invest in overseas projects. It is considered that the rotating cycle of sustainable investment in this form will contribute to improving its enterprise value in the medium to long term.

(4) Addressing the latest market trends in renewable energy

In addition to contending with the green transformation (GX) promoted by the Japanese government, Group company WBB has been addressing the latest market trends in renewable energy, which in part has involved seeking to strengthen the PPA business by establishing the Decarbonized Corporate Business Division as a specialized team for enhancing resources.

(5) Product development capabilities, new technology development

The Rakudenkun portable battery developed by WWB is equipped with folding solar panels that enable it to be charged outdoors, and it also has the feature of being able to be used while it is charging. The battery is equipped with lithium-ion cells that have competitive advantages not only in terms of quality, but also price. Moreover, WWB's MAXAR brand has gained market recognition, particularly with respect to its Maxar LIGHT series featuring an abundant lineup of products such as lightweight modules using fluororesin as a substitute for glass. Having also been working with Associate Professor (technology advisor) Tanaka from The University of Tokyo's School of Engineering in seeking to develop new technologies, WWB has been making progress with respect to investigating renewable energy certification systems and schemes for balancing supply and demand.

Company profile

For next-generation energy-related R&D by Birdy Fuel Cells, the vision is to provide an option that will enable the electric energy obtained by solar power generation to be stored as power supply for 7 days or more for the same price as solar panels.

Market environment

Toward decarbonization, the outlook is that demand for solar power generation will continue to increase in Japan and overseas

According to the 6th Energy Basic Plan resolved on by the Cabinet of the Japanese government in October 2021, the target for the renewable energy introduction ratio in the power supply composition ratios is to increase it from 18% in FY2019 to from 36% to 38% in FY2030, which is an upward revision from the previous target (22% to 24%). Of this percentage, the target for the amount from the introduction of solar power generation facilities is to approximately double it, from 55.8GW in FY2019 to from 103.5 to 117.6GW in FY2030. As a measure to achieve the target in a situation in which there are few plants corresponding to mega solar power plants, based on the revised Act on Promotion of Global Warming Countermeasures, the government will provide support for positive zoning (an initiative to establish renewable energy promotion special zones and to positively form projects) and also promotes measures such as those seeking to establish subsidy programs that facilitate adoption of renewable energy among companies. Also in December 2022, the Tokyo Metropolitan Government established an ordinance mandating the installation of solar panels on newly built homes beginning from April 2025. The Company aims to help in reducing greenhouse gas emissions and has accordingly set the objective of increasing the capacity of its own solar power plants inclusive of the PPA model from the current several tens of megawatts to 1GW (including overseas), as its target for the year 2030.

Power supply composition ratio in Japan

	2019	Previous target	2030 target (ambitious outlook)
Renewable energy	18%	22% to 24%	36% to 38%*
Hydrogen and ammonia	0%	0%	1%
Nuclear power	6%	20% to 22%	20% to 22%
LNG	37%	27%	20%
Coal	32%	26%	19%
Oil, etc.	7%	3%	2%
Greenhouse gases reduction ratio	14%	26%	46%
Amount from introduction of solar power generation facilities	55.8GW	64GW	103.5 to 117.6GW

*If progress is made in utilizing and implementing the results of the R&D into renewable energy currently being worked on, is aiming for higher than 38%.

Source: Agency for Natural Resources and Energy's Summary of the 6th Energy Basic Plan and Energy Demand Outlook for FY2030 (announced in October 2021)

Market environment

On the other hand, in the overseas markets, it was announced that toward realizing carbon neutrality in Europe, 1 trillion euros would be invested as the total of the public and private sectors in the next 10 years. But subsequently, energy prices soared due to the restrictions on the supply of oil and gas by Russia, triggered by the Ukraine crisis, and the situation is that as an alternative, investment in renewable energy, including in solar power generation, is accelerating even more. In the United States as well, the Biden government has set the targets of reducing greenhouse gases by 50% to 52% in 2030 compared to in 2005 and achieving carbon neutrality by 2050. In September 2021, the US Department of Energy announced its estimate that in order to achieve the decarbonization of the electric power sector by 2035, it would be necessary to increase the percentage of total electric power supplied by solar power generation facilities from the current percentage of approximately 3% to around 40%. To achieve this target, it will be necessary to strengthen solar power generation on pace of 30GW a year by 2025 and 60GW a year in the period from 2025 to 2030. Therefore, in the US market as well, demand for solar panels is likely to grow even more in the future.

Results trends

In 1H FY6/23, poised to achieve substantially higher sales and profits due to significant growth in the Solar Module Manufacturing Business

1. Outline of results for 1H FY6/23

In the 1H FY6/23 consolidated results, the amount of sales increased 320.5% YoY to ¥112,071mn, operating income rose 870.5% to ¥5,167mn, ordinary income was ¥5,860mn (¥340mn in 1H FY6/22), and net income attributable to owners of the parent company increased 182.3% to ¥2,269mn, all of which broke previous records by a significant margin. In the Solar Module Manufacturing Business, the amount of sales increased sharply driven by escalating solar power demand internationally, while on the profit front the gain in income was attributable to factors that include effects of higher sales resulting from greater demand, effects of sales price hikes, and lower maritime shipping costs. Meanwhile, whereas the cost of sales ratio climbed from 82.1% in 1H FY6/22 to 88.7% due to changes in the sales composition ratio, the SG&A expenses ratio decreased significantly from 15.9% to 6.7% due to the effects of higher sales, thereby resulting in an increase in the operating income margin from 2.0% to 5.2%.

Non-operating income and expenses foreign exchange improved by ¥885mn YoY, which was mainly attributable to an increase in foreign exchange gains of VSUN (increase of ¥621mn) and an increase in share of profit of entities accounted for using equity method associated with Meiji Machine (increase of ¥355mn).

Results trends

Consolidated results for 1H FY6/23

	1H FY6/22		1H FY6/23		YoY
	Results	% of amount of sales	Results	% of amount of sales	
Amount of sales	26,655	-	112,071	-	320.5%
Cost of sales	21,886	82.1%	99,357	88.7%	354.0%
SG&A expenses	4,236	15.9%	7,546	6.7%	78.1%
Operating income	532	2.0%	5,167	4.6%	870.5%
Ordinary income	340	1.3%	5,860	5.2%	-
Extraordinary income/loss	1,009	-	-117	-	-
Net income attributable to non-controlling interests	129	0.5%	2,577	2.3%	-
Net income attributable to owners of the parent company	803	3.0%	2,269	2.0%	182.3%
EBITDA	1,198	4.5%	6,297	5.6%	425.6%

Source: Prepared by FISCO from the Company's financial results

Results by business segment

Amount of sales	(¥mn)			
	1H FY6/21	1H FY6/22	1H FY6/23	YoY
Solar Module Manufacturing Business	8,760	22,921	107,441	368.7%
Green Energy Business	2,502	3,618	4,425	22.3%
Income from electricity sales and O&M	-	1,036	1,585	53.0%
Flow-type business	-	2,582	2,840	10.0%
IT Business	11	14	328	-
Photocatalyst Business	54	55	18	-66.9%
Others	244	242	21	-91.3%
Adjustment amount	-	-197	-163	-
Total	11,573	26,655	112,071	320.5%

Segment income	(¥mn)			
	1H FY6/21	1H FY6/22	1H FY6/23	YoY
Solar Module Manufacturing Business	545	223	4,612	-
Green Energy Business	501	619	932	50.6%
IT Business	-7	0	11	-
Photocatalyst Business	-1	9	-23	-
Others	-13	-14	-62	-
Adjustment amount	-178	-305	-302	-
Total	845	532	5,167	870.5%

Source: Prepared by FISCO from the Company's financial results

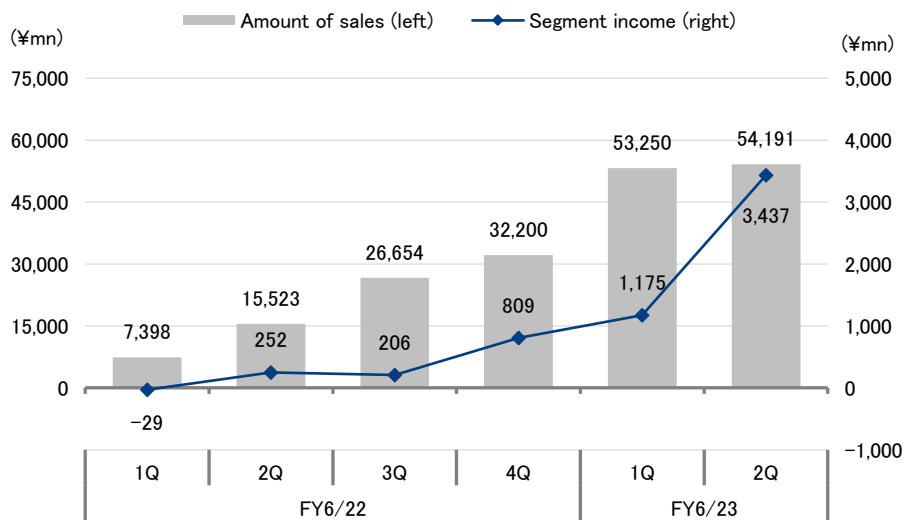
(1) Solar Module Manufacturing Business

Against a backdrop of strong demand for solar power generation worldwide, sales and profits increased significantly in the Solar Module Manufacturing Business, with the amount of sales increasing 368.7% YoY to ¥107,441mn and segment income rising to ¥4,612mn (¥223mn in 1H FY6/22). In 1H FY6/22, revenues were affected by factors that include a temporary slowdown in operations of plants in Vietnam amid the COVID-19 pandemic and restrictions of product shipments due to port congestion. However, sales increased significantly amid a scenario where alleviation of these external factors enabled full operations and ongoing shipments. By geographic region, there was a significant increase in sales to the United States while sales to Europe also held strong. Sales to South America, Africa and Southeast Asia also appear to have increased, albeit the proportion of sales to these markets is not yet significant.

Results trends

In terms of profits, the increase in income is attributable to factors that include effects of higher sales resulting from greater demand, price hikes made in response to higher costs imposed beginning in 2H FY6/22 having taken hold, and lower maritime shipping costs. In terms of quarterly profit margins, the profit margin recovered significantly having climbed to 6.3% in 2Q after having remained low in 1Q at 2.2%. FISCO thinks it likely that the operating income margin for 2H will increase slightly from the 6% range given that effects of product price hikes and declining maritime shipping costs are likely to persist into 2H. Meanwhile, VSUN's fourth plant completed in October 2022 shifted into full operation in January 2023, after a phase of it having initiated successive trial runs. Given that operations of the fourth plant have now increased annual production capacity to 5.0W from 2.6GW previously, there is a likelihood of further gains in the amount of sales and income in 2H.

Quarterly results in the Solar Module Manufacturing Business



Source: Prepared by FISCO from the Company's financial results

(2) Green Energy Business

In the Green Energy Business, the amount of sales increased 22.3% YoY to ¥4,425mn, and segment income increased 50.6% to ¥932mn. The Company is at a stage where it is converting the business model of this business from the previous flow-type business, of solar power plant and product sales, to a stock-type business in which revenue from electric power sales from the solar power plants that it builds and owns provides a stable earnings foundation.

Results trends

Looking at the breakdown of the amount of sales, flow sales, which include power plant sales and product sales, increased 10.0% YoY to ¥2,840mn, while stock sales from electric power sales and O&M rose 53.0% to ¥1,585mn, thereby suggesting steady expansion with respect to stock sales. The increase in sales is attributable to revenue from electric power sales of both power plants that embarked on electric power sales in 2H FY6/22 and power plants acquired through M&A. Meanwhile, O&M revenue has remained strong in serving as a stable source of earnings. In addition, companies' interest in sustainable management is rising, and in this situation the Group is aiming to strengthen its planning and proposal capabilities involving solutions for decarbonization management. As such, the Group has accordingly been serving as a PPA*1 operator in actively promoting Non-FIT projects*2 and solar sharing projects. In the overseas business, the Group is seeking to expand its business while collaborating with entities such as local enterprises and trading companies in regions such as South America and Africa going forward, given that projects are gradually beginning to get underway with the relaxation of travel restrictions.

*1 A power purchase agreement (PPA) is an agreement whereby a company that owns and manages solar power generation facilities (PPA operator) installs a solar power generation system on a site, rooftop or other such location provided by a facility owner, with the electricity subsequently generated by such solar power generation system then provided to the facility's electricity users for a fee.

*2 A Non-FIT project is a solar power plant that does not depend on the FIT (Feed in Tariff) system. The reason is that electric power from solar power plants that utilize FIT has already paid a price for the environmental value in the form of the renewable energy levy and is not certified to be 100% renewable energy (because the environmental value belongs to the person paying the renewable energy levy). However, Non-FIT electric power is certified to be 100% renewable energy, and needs are increasing for Non-FIT solar power plants for self-consumption for those wanting to use 100% renewable energy, instead of the main purpose being to acquire profit through electric power sales.

(3) IT Business

In the IT Business, the amount of sales was ¥328mn (¥11mn in 1H FY6/22) and segment income was ¥11mn (¥0mn in 1H FY6/22). The increase in sales and profits is attributable to the addition of revenue from Digital Sign, which was made a subsidiary in March 2022.

Abit provides KnowledgeMarket®, which is an in-house product in order to improve labor productivity through the sharing of knowledge (information, findings, and experience) and the rebuilding of work processes. It also provides a DX support service that utilizes Microsoft 365 and services that uses other RPA products to improve efficiency and for labor saving. Also, in relation to aspects such as the provision of green energy and the promotion of RE100, it is progressing this business to meet the needs of SDGs-orientated companies, local governments and others while aiming to coordinate with the Green Energy Business and the healthcare-related business, resulting in strong business results. Meanwhile, leveraging its strengths in data security technologies, Digital Sign released its "e-Digi Sign" electronic contract service in February 2023. In conjunction with that, Digital Sign furthermore plans to expand its business with operations of its "Information Asset Management Magazine" owned media aimed at promoting data security and its "Joho Ichhiba" e-commerce website focused on security products, combined with its professional talent referral services.

(4) Photocatalyst Business

The Photocatalyst Business has been impacted by the decline in needs for COVID-19 anti-infection measures, and the amount of sales decreased 66.9% YoY to ¥18mn and it recorded a segment loss of ¥23mn (profit of ¥9mn in the previous period). Japan Photocatalyst Center concluded a business partnership with WWB and Meiji Machine in November 2022. Going forward, the entities will forge ahead in tapping demand for antibacterial and antiviral products geared to the livestock industry by drawing on Meiji Machine's customer base.

Outlook indicates trend toward gradually increasing equity ratio going forward

2. Financial condition

Looking at the financial condition at the end of 1H FY6/23, total assets increased ¥33,583mn relative to the end of the previous period to ¥118,764mn, mainly due to significant expansion in VSUN's scale of business. Current assets increased ¥27,709mn. Breaking down the main items, there were increases in cash and deposits of ¥15,455mn and merchandise and products of ¥12,690mn, while notes and accounts receivable – trade decreased ¥4,484mn. Meanwhile, non-current assets increased ¥5,838mn. There were increases in property, plant, and equipment of ¥3,762mn and “other” under intangible assets of ¥1,860mn.

Total liabilities were ¥105,292mn, an increase of ¥28,117mn from the end of the previous period. Current liabilities were affected by a decrease in accounts payable-trade of ¥2,726mn, against increases in short-term borrowing of ¥8,115mn and contract liabilities of ¥19,046mn. Non-current liabilities were affected by a decrease in long-term borrowing of ¥1,461mn. In terms of fundraising, WBB raised working capital of ¥400mn on September 2, 2022, upon having concluded a sustainability-linked loan agreement per assessment of the Company's decarbonization initiatives and track record in the Green Energy Business. It has furthermore expressed its intention to take an active approach to arranging loans associated with green finance in relation to sustainability and ESG going forward.

Total net worth was ¥13,472mn, an increase of ¥5,465mn from the end of the previous period. Meanwhile, retained earnings increased ¥2,214mn partially as a result of the amount recorded for net income attributable to owners of the parent company, and non-controlling interests increased ¥3,327mn due to VSUN's revenue expansion.

The equity ratio gained from 5.4% as of end-September 2022 to 6.8% as of the end of 1H FY6/23. Going forward, the equity ratio is poised to moderately increase amid a scenario where shareholders' equity has been enhanced due to further expansion of revenues. In January 2023, in seeking to achieve an equity ratio of no less than 10%, the Company accordingly took steps to augment its capital by raising approximately ¥1.4bn in additional funds and otherwise set its sights on increasing its retained earnings with a focus on the Solar Module Manufacturing Business and the Green Energy Business as one of its key initiatives.

Consolidated balance sheet

	(¥mn)				
	FY6/20	FY6/21	FY6/22	1H FY6/23	Change
Current assets	8,553	22,537	57,450	85,160	27,709
(Cash and deposits)	1,209	4,722	3,966	19,422	15,455
(stock*)	6,533	11,312	31,320	45,348	14,028
Non-current assets	6,193	16,835	27,719	33,557	5,838
Property, plant and equipment	5,528	15,201	20,599	24,361	3,762
Intangible assets	110	365	4,688	6,385	1,697
(Goodwill)	77	332	4,631	4,468	-163
Investments and other assets	554	1,268	2,432	2,810	378
Total assets	14,764	39,388	85,181	118,764	33,583
Current liabilities	6,745	26,212	57,721	87,400	29,679
Non-current liabilities	5,859	8,398	19,452	17,891	-1,561
Total liabilities	12,605	34,611	77,174	105,292	28,117
Total net worth	2,159	4,777	8,007	13,472	5,465
<Stability>					
Equity ratio	14.2%	10.2%	7.0%	6.8%	-0.2pt

* Stock is the sum of real estate for sale, merchandise and products, work in progress, and raw materials and storage items.
 Source: Prepared by FISCO from the Company's financial results

■ Outlook

FY6/23 forecast upwardly revised for a second time, but remains conservative with upside potential

1. Consolidated outlook for FY6/23

The Company has once again upwardly revised its forecast for the FY6/23 consolidated results, following on its initial forecasts and those upwardly revised in November 2022. Accordingly, for FY6/23, the Company projects amount of sales of ¥175,000mn for an increase of 89.3% YoY, operating income of ¥7,000mn for an increase of 312.3%, ordinary income of ¥7,300mn for an increase of 383.3%, and net income attributable to owners of the parent company of ¥3,400mn for an increase of 292.1%. The Company has opted to once again increase its forecasts in part because VSUN's orders and sales of solar panels for the markets of Europe and the United States have exceeded its expectations, and also because it has encountered remarkable improvement in profit margins due to factors mentioned previously such as sales price hikes and lower maritime shipping costs. Unless the Company encounters substantial supply chain disruption or sharp exchange rate volatility going forward, FISCO deems it highly likely that the Company's full-year results will substantially outperform its forecasts. For one, this seems likely because the Company has made substantial progress thus far toward achieving results set forth in its current revised forecasts for the full year, given its progress rates of 64.0% in amount of sales and 73.8% in operating income through to the end of 2Q. It also seems likely given that there is a high possibility that profit margins will increase further with VSUN's fourth plant operating at full capacity in 2H.

Although the fourth plant has been in full operation since January 2023, the financial impact associated with such full operation has not been factored in to the second revised forecast due to certain difficulties inherent in making rational projections given the short duration of time since the plant's launch.

Consolidated outlook for FY6/23

	FY6/22 Results	FY6/23				YoY	Revised amount	1H progress rate
		Initial forecasts	Revised forecasts (November 2022)	Current forecasts (February 2023)				
Amount of sales	92,435	110,000	150,000	175,000	89.3%	25,000	64.0%	
Operating income	1,697	2,900	4,150	7,000	312.3%	2,850	73.8%	
Ordinary income	1,510	2,810	3,800	7,300	383.3%	3,500	80.3%	
Net income attributable to owners of the parent company	867	1,280	1,450	3,400	292.1%	1,950	66.7%	
Earnings per share (EPS) (¥)*	52.78	77.02	87.25	204.55				

* EPS in FY6/22 is the value after the 1:3 share split implemented on September 1, 2022

Source: Prepared by FISCO from the Company's financial results

(1) Solar Module Manufacturing Business

Whereas the Company's initial forecasts projected amount of sales in the Solar Module Manufacturing Business of around ¥100bn, the most recent forecasts project amount of sales of around ¥165bn, which is double that of the previous fiscal year. However, it is possible that the full-year amount of sales will grow to around ¥200bn given that orders currently remain strong and given that VSUN's fourth plant has been operating at full capacity since January 2023.

Outlook

With respect to segment income, it appears that the profit margin in 2H is capable of holding to no less than the 6% range in part given factors that include the successful launch of VSUN's fourth plant along with the likelihood of price hikes taking hold and a persisting downward trend in maritime shipping costs. It is sufficiently possible that operating income for the full year will exceed ¥10bn (¥1,238mn in FY6/22) if the order situation remains unchanged going forward.

In considering effects of exchange rate volatility on results, sales are denominated in either U.S. dollars or euros, while parts purchases, maritime shipping costs and other such expenses are denominated in U.S. dollars. Those currencies are currently strong relative to the Vietnamese dong, which has a positive effect in terms of VSUN's financial results.

(2) Domestic stock sales

Domestic stock sales are forecast to be more than ¥3,300mn on considering the operations of existing power plants, the connection to the grid of plants currently under development, and projects acquired through M&A. Projects currently under development include the Kamisu Solar Power Plant at which operations started in January 2023 (Ibaraki Prefecture; forecast annual revenue from electric power sales: approximately ¥32mn), and the Yamato Town and Ohira Village Solar Power Plant scheduled to be put into operation (Miyagi Prefecture; forecast annual revenue from electric power sales: approximately ¥530mn). In January 2023, for ¥1,368mn, WBB acquired all shares of Flex Holdings, which owns a solar power plant with capacity of approximately 7.9MW located in Ibaraki Prefecture (forecast annual revenue from electric power sales: approximately ¥350mn) as an M&A initiative. The acquisition will contribute to sales in 2H. Meanwhile, given that electric power sales and O&M revenue amounted to ¥1,585mn in 1H, it seems sufficiently likely that domestic stock sales will exceed ¥3,300mn for the full year.

The Company raised ¥1,399mn through a capital increase from a third-party allocation carried out in January 2023 with the aim of securing funds for investment in the solar power generation business (635,600 shares were issued at a price of ¥2,202 yen per share). The allottees include an investment firm, Meiji Machine and business partners.

(3) Domestic flow sales and other businesses

Given a domestic stock sales budget of ¥3,300mn, domestic flow sales are expected to decrease on a pro-forma basis from FY6/22 sales of ¥8,009mn to slightly under ¥7,000mn. Whereas flow sales are subject to volatility depending on factors such as the timing of power plant sales, it seems likely that they will largely align with the forecast given that they amounted to ¥2,840mn in 1H FY6/23.

When it comes to solar power plants, the Company seeks to strengthen its PPA business in part by taking on green transformation (GX) and establishing the Decarbonized Corporate Business Division at WWB, while maintaining its self-ownership and sales of solar power plants. Going forward, the Company's plans entail expanding its solar sharing business through its alliance with Meiji Machine and actively pursuing the EPC business in Southeast Asia, South America, and elsewhere in partnership with local enterprises and trading companies. Additionally, the Company will strengthen its framework geared to business expansion in the reuse and recycling business in which it has been steadily building a track record.

FY6/24 earnings results targets upwardly revised for a second time, but there is potential for further upside due to effects of better profit margins amid a shift to mass production of cells

2. Further upward revision of the medium-term management plan and key initiatives

(1) Overview of the medium-term management plan revised upward again

In October 2021, the Company announced its three-year medium-term management plan (FY6/22 to FY6/24) and is moving forward on it. It has positioned this period as the runway period for its aim of becoming “a core global renewable energy group,” which is its 2030 Group Vision, and with the Solar Module Manufacturing Business and the Green Energy Business as its growth engines, its policy is to aim to maximize the Group’s sustainable growth and enterprise value.

Whereas the Company had been aiming to achieve medium- to long-term targets of 1GW in domestic and overseas power generation capacity of owned power plants by FY2030 and a solar panel annual manufacturing target of 8GW (currently 5.0GW) in FY2030, it is now poised to reassess its business targets given that it achieved the medium-term management plan targets ahead of schedule.

The Company upwardly revised the results targets of its medium-term management plan in September 2022 given that VSUN’s results marked increases at a much faster pace than anticipated subsequent to release of the plan, but then it released a second upward revision in February 2023 in light of prevailing earnings performance amid a subsequent scenario of continuing strong demand for solar panels and improvement in profit margins. Specifically, the Company set targets with respect to amount of sales at ¥251.8bn for a YoY increase of ¥101.8bn, operating income at ¥15.8bn for an increase of ¥11.3bn, ordinary income at ¥15.8bn for an increase of ¥12.0bn, and net income attributable to owners of the parent company at ¥8.0bn for an increase of ¥6.2bn. With respect to amount of sales by business segment, most of the revision amount is attributable to an upward revision of ¥101.0bn YoY to ¥239.0bn in VSUN’s Solar Module Manufacturing Business. The revision is also attributable to an outlook for steady growth in the domestic business where flow sales were revised upward by ¥200mn to ¥7.8bn and stock sales were revised upward by ¥600mn to ¥5.0bn. It should be noted that effects of improved profit margins brought about by a shift to mass production of cells has not been incorporated into this second revision. The Company will again revise its targets when it becomes possible to come up with a rational future outlook, particularly in terms of improvement of profit margins brought about by circumstances after the cell plant goes into operation. The Company will promptly disclose findings once it has been determined that results for FY6/24 are likely to further exceed expectations.

Outlook

Medium-term management plan's revised targets

	FY6/22 Results	FY6/23 Target	FY6/24		
			Revised targets (announced September 2022)	Second revised targets (announced February 2023)	Revised amount
Amount of sales	92,435	175,000	150,000	251,800	101,800
Solar Module Manufacturing Business (VSUN)	81,775	165,000	138,000	239,000	101,000
Domestic flow sales*1	8,009	6,700	7,600	7,800	200
Domestic stock sales*2	2,651	3,300	4,400	5,000	600
Operating income	1,697	7,000	4,500	15,800	11,300
Operating income margin	1.8%	4.0%	3.0%	6.3%	3.3pt
Ordinary income	1,510	7,300	3,800	15,800	12,000
Net income attributable to owners of the parent company	867	3,400	1,800	8,000	6,200
Earnings per share (EPS) (¥)	52.78	204.55	108.29	481.29	373.00

*1 Includes the businesses carried out by the domestic Group companies of power plant sales, product sales (panels, storage batteries, etc.), the reuse and recycling business, the energy saving business, etc.

*2 Revenue from electric power sales from solar and wind power plants, etc., stable revenue from O&A, etc., and the revenue businesses that are the sources of cash flow.

Note: EPS in FY6/22 is the value after the 1:3 share split implemented on September 1, 2022; EPS in FY6/23 and FY6/24 is the value after the 1:3 share split implemented on August 31, 2022

Source: Prepared by FISCO from the Company's releases

(2) Key initiatives to further increase enterprise value

In February 2023, VSUN announced that it will construct a solar cell plant in Vietnam (Phu Tho Province) with the aim of transitioning from current external sourcing to in-house production of solar cells (N-type TOPCon) that serve as the primary component of solar panels. In the first phase, the Company seeks to build a plant with 3GW annual production capacity (investment amount: approx. US\$180mn or ¥23.67bn*), and aims to complete the facility by October 2023. The Company plans to use equity capital as its source of capital investment funds, with the remainder covered by borrowings from local financial institutions. In the second phase of the project, the Company will augment capacity by a further 3GW, thereby setting up a production framework constituting a total of 6GW (total investment amount: approx. US\$300mn or ¥39.45bn*).

| * US\$1 = ¥131.5 |

There are three main objectives the Company seeks to achieve in shifting to in-house production of solar cells. The first entails the prospect of reducing costs and improving profit margins by shifting to in-house production of primary cell components. The second is that of stabilizing parts procurement and strengthening the supply chain by shifting to in-house production of primary components. The third is that of building a production framework for contending with the anticipated strengthening of import restrictions imposed on solar panels that use Chinese-made components in the United States and other countries, and addressing such risks. Whereas the profit margin is currently around 6%, the Company expects to achieve a profit margin of over 10% by enlisting production integrated from solar cells to modules, even taking into account higher depreciation costs. The N-type TOPCon cells that are to be mass-produced feature high conversion efficiency and low performance degradation, while their production volume is currently limited to several major panel manufacturers in China. VSUN has already secured core engineers and is also making progress in hiring and training professionals to immediately launch into full-scale production after completion of the plant in autumn of 2023. The Company expects to achieve shorter lead times given that the module plant's location situated slightly over one hour's drive from the cell plant. If the project proceeds smoothly, the plant is likely to significantly contribute to FY6/24 profits. Although the Company currently sells solar panels mainly in Europe and the United States, it plans to place focus on sales in emerging markets such as those of South America, Africa and Southeast Asia over the medium term.

Outlook

Establishment of the new solar cell plant (VSUN)

- **We are building our own solar cell plant to produce solar cells, a key component of solar panels.**
 - Project details: Annual capacity of 6GW
 - Total investment (planned): Approx. 300 million US dollars (39.45 billion yen*)

Note: Calculated based on TTM (mid-point) of 131.50 yen/US dollar published in MUFG's Foreign Exchange Rate List (updated at 9:00 a.m. on February 10, 2023).

- **First, Phase 1 will be implemented (to be completed in October 2023)**
 - **Benefits of in-house production: Lower costs and significantly higher profit margin**
 - More control over upstream processes in our supply chain
 - Adapt to changes in market trends (such as import rules in each country)

(1) CAPEX:	Approx. 180 million US dollars (23.67 billion yen)
(2) Location:	Cam Khe Industrial Park, Phu Tho Province, Vietnam
(3) Site area:	Approx. 13.42 hectares
(4) Production capacity:	Annual production capacity of 3GW
(5) Manufactured products:	Solar cells (key components of solar panel manufacturing)
(6) Payment method:	Funded by internal capital and borrowed funds

Note: Calculated based on TTM (mid-point) of 131.50 yen/US dollar published in MUFG's Foreign Exchange Rate List (updated at 9:00 a.m. on February 10, 2023).

Source: The Company's results briefing materials

With respect to the IPO of VSUN, the Company plans to also consider overseas markets other than Vietnam given the small size of the Vietnamese market when it comes to raising funds. Other key initiatives include efforts in promoting the main businesses (Solar Module Manufacturing Business and Green Energy Business), as well as handling business management encompassing management, finance and investor relations. Details are as follows:

<Promotion of main businesses>

a) Solar Module Manufacturing Business

- Launch full-scale operations of the fourth plant (increase of annual production capacity from 2.6GW to 5GW)
- Complete cell plant (first phase) then proceed to the second phase
- Further improve and increase profit margins
- Pursue IPO in the Vietnamese market and other markets abroad

b) Green Energy Business

- Self-consumption projects (Non-FIT and non-firm) , promoting solar sharing
- Conduct M&As involving renewable energy-related companies to accelerate business expansion
- Develop hydrogen products and promote related business
- Promote alliances and strategic partnerships with leading companies and general trading companies

<Business management>

a) Management and finance

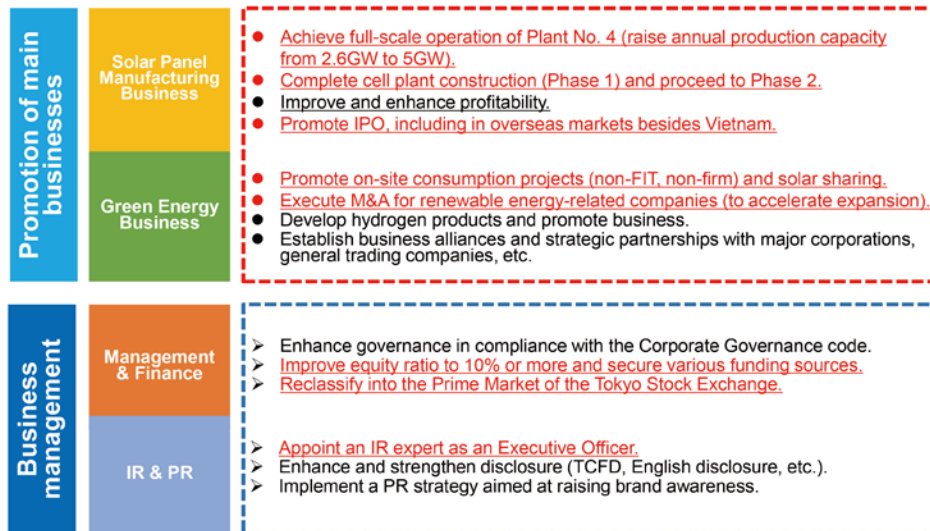
- Further strengthen governance in alignment with Japan's Corporate Governance Code
- Improve the equity ratio (over 10%) and secure various fundraising methods
- Change the listing designation to the Prime Market

Outlook

b) Investor relations

- Appoint an IR expert to serve as a new Executive Officer
- Upgrade and strengthen disclosure (TCFD, English-language disclosure, etc.)
- Implement PR strategy geared to raising visibility

Key initiatives to further increase enterprise value



Source: The Company's results briefing materials

Shareholder return policy

Basic policy is to stably and continuously pay dividends and to actively return profits to shareholders according to its financial situation; Seeking to strengthen shareholder returns through capital gains

The Company's basic shareholder return policy is, after considering returning capital gains based on improving enterprise value through results growth, to stably and continuously pay dividends and actively return profits to shareholders according to its financial situation while maintaining a good balance between "returning profits to shareholders" and "securing internal reserves to fund growth."

The Company will pay a dividend of ¥3.0 per share at the end of 1H FY6/23, which constitutes an effective increase relative to the dividend of 1H FY6/22 (whereas the dividend amounted to ¥8.0 per share in 1H FY6/22, this effectively constitutes an increase of ¥1.0 per share given that the Company implemented a 1:3 share split in September 2022). Although the year-end dividend is yet to be determined, FISCO deems it highly likely that the Company will increase its dividend given prevailing earnings results. The Company also explains that it intends to fortify its shareholder returns on the basis of its capital gains, driven by corporate growth, management efforts and better valuation from the capital market.

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