

【Update Report】

| Company |

TAMAGAWA HOLDINGS CO., LTD.

| Code |

6838 : JASDAQ

| Analyst |

C&A Senior Analyst

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C&A

C&A Investment Research

【TITLE】**Ultimate Defensive & Growth Company**
5G demands come into sight**"Buy" rating continues with share price targeted at 2,750 yen****【Target Share Price】**

2,750 yen

(as of Dec./20/2018)

(as of Jul./2/2018: 2,500 yen)

【Rating】

Buy (continue)

(as of Dec./20/2018)

【Performance Forecasts】

FY03/2019

Net sales: 5,500 million yen; Operating income: 280 million yen;

Ordinary income: 75 million yen;

Net income: 45 million yen (as of Jul/2/2018) ⇔ 150 million yen (as of Dec./20/2018)

【Themes】

defensive; national strategies; renewable energy; photovoltaic station; wind power station;

growth; 5G; IoT; analog high-frequency radio; global niche; still-remaining company

(as of Dec./20/2018)

【Remarkable points】**① During the 2Q, FY03/2019, both revenues and earnings increased, operating income registered surplus, and V-shaped recovery has been realized.**

On November 11, 2018, the Company announced its financial results of the 2Q as follows: Net sales: 1,655 million yen (+27%, +352 million yen YoY); Operating income: 16 million yen (+81 million yen from (65) million yen in the same period of the previous year); Ordinary loss: (94) million yen (+20 million yen from (114) million yen in the same period of the previous year); Net loss: (94) million yen (+24 million yen from (118) million yen in the same period of the previous year); namely, both revenues and earnings increased overall. It should be noted that Net sales substantially increased by 27%, Operating income increased by 81 million yen leading to surplus, and V-shaped recovery has been realized. Ordinary income and Net income also improved.

< Performance in the first half: Renewable energy business >

Increases in both revenues and earnings were due to improvement in renewable energy business. Net sales was 675 million yen (+165.7% and +369 million yen as compared to 239 million yen in the same period of the previous year), and Segment income was 134 million yen (+128 million yen as compared to 6 million yen in the same period of the previous year), both of which substantially improved.

Specifically, such improvement was due to the facts (1) photovoltaic stations currently in operation at Shimonoseki City, Tateyama City, Sodegaura City and Kasumigaura City have run smoothly to sell electric power; (2) Mega-solar station at Goto City (Nagasaki Pref.) and Solar-sharing station at Shimada City (Shizuoka Pref.) have started in full-scale to sell electric power from the current quarter; (3) 10 compartments of photovoltaic station (low voltage) were sold (in comparison, just one wind power facility was sold in the same period of the previous year); and (4) Gross profit increased along with net sales and SG&A expenses could be reduced by 30 million yen.

For the purpose of cost reduction in the first half, business segment of selling renewable energy systems put its efforts to separated order-making, thorough cost reduction in each and every material and construction work, and diversification of suppliers. Renewable energy station business has put its efforts to building up a network of projects in collaboration with other companies and partially internalizing O&M (operation and maintenance), which can be considered successful. Improved performance in the renewable energy station business segment as the Company's second pillar is deemed as a factor for greater anticipation in the future growth strategies.

< Performance in the first half: Electronic & communication devices business (TAMAGAWA ELECTRONICS) >

In the electronic & communication devices business segment, Net sales slightly decreased by (2.5)% as compared to the previous year. In this segment about 50% of net sales are from public projects and traditionally it tends to rely on achievements during the second half, so such a slight decrease does not matter so much.

As for income, despite of the result being (31) million yen namely decrease by 41 million yen as compared to the previous year, this is not much large as planned. Decrease in income is due to higher cost percentage caused by large-scale capital investment in preparation for future growth and increase in new projects. New projects are accompanied by trouble-shooting, resulting in higher cost and lower profit rate.

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Full-term forecast of net sales in this segment is 300 million yen, namely +14.3% as compared to the previous year, which is rather strong but there is no change at this point. What would be an issue for the second half is how much income reduction could be suppressed.

< Order-taking: Electronic & communication devices business >

One remarkable point in this segment is the substantial increase in order-taking during the first half by 75%, in the amount of 709 million yen. This is due to increased order-taking of system products in relation to public projects and social infrastructure. Each segment of mobile communication infrastructure has also achieved good performance so far. In addition, OUT-OUT (order-taking from and sales to overseas customers) is on the increase in both inquiry and order-taking, running smoothly.

< Order-taking: 5G-related >

With respect to inquiry/order-taking in the 5G-related business, orders from Korean customers have started to come in Vietnam. Domestically, there have been inquiries about device components (e.g. filter, ATT, distributor) used mainly for mobile communication base station facilities, and order-taking of them would be determined sequentially according to the results of forthcoming bidding and other events. Therefore, domestic mass-production and shipment of 5G-relates products can be expected to take place during the first half of the next term and onwards.

< EV/PHEV-related business >

In the EV/PHEV-related business, optical feeding ROFs have already been sold to several finished car manufacturers' prototype departments and one car electronics manufacturer. Mass merchandizing is now on the way and its future development may be anticipated.

< Electronic & communication devices business: Net sales in the mobile infrastructure segment >

Net sales during the first half in the mobile infrastructure segment of electronic & communication devices business achieved substantial increase by 50.2%, namely 111 million yen, so further growth can be anticipated in the future.

② **Mega-solar station at Noboribetsu City (Hokkaido Pref.) started to sell electric power.**

On November 2, 2018, the Company announced that its mega-solar station at Noboribetsu City (Hokkaido Pref.) started to sell electric power. This station is able to sell electric power at 40 yen/kWh (excluding tax) for 20 years, and has 12 installations of automatic tracking system capable of improving efficiency for power generation by solar energy. From November, revenues from selling electric power by this station contribute to the Company's earnings.

③ **Station at Minamishimabara City (Nagasaki Pref.) was sold/demised; and Kamo station at Kasumigaura City were sold.**

On July 23, 2018, the Company sold its station at Minamishimabara City (Nagasaki Pref.) (49 kW; FIT of 40 yen), including its right of extension for about 1 MW. Moreover, on December 3, 2018, the Company announced that it would sell its Kamo station at Kasumigaura City (2.4 MW; FIT of 36 yen). Proceed from the latter is about 136 million yen which will be allocated to extraordinary income in 3Q of the current term. Selling these two stations makes the Company's cash position, which will accelerate future investment.

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④ A local subsidiary was established in Republic of Singapore.

Its purposes are as follows: business in general concerning renewable energy; research, analysis, study, and planning of business association concerning company management, business development/promotion; mediation of associated business partners; consulting services; and functions as a trading firm (assuming sales activities for the group companies' products). Production at TAMAGAWA ELECTRONICS's factory in Vietnam has achieved steady performance and started to take orders from Vietnam and other neighboring countries, so its future success would be greatly anticipated.

⑤ Ultimate defensive stock

Problems around energy-related matters in Japan mainly include global warming countermeasures and improvement in energy self-sufficiency rate. Japanese government has set its targets as: increase in percentage of renewable energy from about 12% (at present) to 22 - 24%; and increase in energy self-sufficiency rate from about 6% (at present) to 25%.

In order for higher percentage of renewable energy, Japanese government has adopted Feed-in Tariff since 2012, that is a subsidy scheme in which energy purchase prices are established by law.

As the government guarantees purchase of electric power for a long period, longstanding stable revenue would be provided to renewable power generation entities.

The Company can be described as an ultimate defensive stock, not affected by economic trends for a long period.

⑥ Large-scale evolution: from photovoltaic stations to small wind power stations; further strengthened revenue base and impact

Construction work of photovoltaic stations during the current term will be put to bed at the time of starting electric power at Noribetsu station (2.0 MW). However, the Company has already obtained rights to sell electric power at 50 places in Tohoku/Hokkaido regions in order to engage in small-scale wind power generation business (fixed purchase price of 55 yen/kwh; as of Feb/23/2018), and further announced (as of Jun/25/2018) that it would construct small-scale wind power stations by an SPC scheme, in collaboration with third parties having rights to sell electric power (fixed purchase price of 55 yen/kwh).

These two disclosed information have great strategic implications to the Company for the future. During the current term, the Company will, while making a shift from constructing photovoltaic stations to constructing wind power stations, have a strategy to continue to proactively engage in renewable energy business and further strengthen its stable revenue base. In addition, some new business deriving from these two disclosures would have significant impacts on the Company's performance in the days ahead.

⑦ Growth: Another growing market

Renewable energy business will demonstrably continue to expand in the context of the government's national strategies. Another business segment of electronic & communication devices business is also positioned in a steadily growing market.

TAMAGAWA ELECTRONICS CO., LTD. develops and manufactures various products carrying high-frequency radio technologies which are generally considered as essential in the field

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of communication infrastructure that supports highly sophisticated information society. Its responsibility is for infrastructure part of many industries, including mainly mobile communication, broadcasting, disaster prevention, and traffic facilities.

Markets surrounding TAMAGAWA ELECTRONICS, such as 5G (described as 100 times faster than the current 4G technologies), IoT, automatic driving and robotics, will rapidly and demonstrably expand. This means that TAMAGAWA ELECTRONICS is very likely to enhance its business performance sharply.

⑧ Overwhelming advantages: Merits as a still-remaining company; Global niche; World's highest quality

TAMAGAWA ELECTRONICS is a rare, still-remaining company that has analog high-frequency radio technologies. Formerly, major electric manufacturers used to have analog high-frequency technologies and make such equipment, just like TAMAGAWA ELECTRONICS. However, with the drastic shift to digitalization, they totally shifted to digital equipment for which engineers could be trained more easily and which can be mass-produced. Nevertheless, analog technologies are required at entrance and exit of digital equipment, so TAMAGAWA ELECTRONICS currently provides various niche products as a still-remaining company boasting analog high-frequency radio technologies.

It is very hard and time-consuming to acquire analog high-frequency technologies, such that a person would need 10 years of experience to become an analog engineer. In other words, to manufacture products requiring analog technologies it is indispensable for a manufacturer to employ skilled engineers, and such technologies cannot be imitated easily.

For 50 years TAMAGAWA ELECTRONICS has supplied its products to Japanese manufactures and public offices being considered as requesting to meet the highest quality standards in the world. Taking into account these 50 years of experiences, know-hows and achievements, products made with its analog high-frequency technologies can be unquestionably viewed as boasting the world's highest quality.

In addition, technologies such as IoT and 5G supporting highly sophisticated information society have been developed even further, and therefore products of ever-higher quality are needed in order to realize such high level of performance.

In 2016, TAMAGAWA ELECTRONICS started to assemble products in its factory in Viet Nam, as a measure to counter lower-priced overseas products. Today, its products are of the same quality as those made in Japan and more than 80% of their materials are procured locally, greatly contributing to cost reduction. Now that being capable of providing world's highest quality products at lower prices, TAMAGAWA ELECTRONICS has become a company having overwhelming advantages worldwide.

TAMAGAWA ELECTRONICS, as a rare, still-remaining company having analog high-frequency radio technologies and as a global niche company, is rapidly expanding its overseas channels for selling the world's highest quality products mainly in Southeast Asia.

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【Performance forecasts for FY03/2019】

During the current term (FY03/2019):

- ① Profitability in the renewable energy business segment has substantially improved during the first half;
- ② From March 30, Goto-Koujindake mega-solar station (5.3 MW; FIT of 36 yen) and from November a newly established mega-solar station at Noboribetsu City (2.0 MW; FIT of 40 yen) have started selling electric power;
- ③ Each pre-existing stations has steadily sold electric power;
- ④ Extraordinary income of 136 million yen from selling the station at Kasumigaura City will be allocated;

and therefore revenues and earnings would surely increase in the renewable energy business segment.

In another business segment of electronic & communication devices,

- ⑤ In every market and field (mobile communication infrastructure, public projects and others (related to measurement and EMC)), steady demand growth can be anticipated;
- ⑥ Full-scale operation of the Company's first overseas factory in Viet Nam enabled shipment of high quality and price-competitive products, leading to increase in inquiries and order-taking from overseas;
- ⑦ New products for which 5G Low band development has been completed are in the process of authentication registration with telecommunication carriers and are expected to be adopted sequentially;

and therefore revenues and earnings would surely increase also in this business segment.

So, from the current term and onwards, it is expected that revenues and earnings will surely increase for the holding company as a whole.

The Company itself expects for the current term (FY03/2019) Net sales of 5,186 million yen; Operating income of 239 million yen; Ordinary income of 22 million yen; and Net income of 14 million yen. But upon considering overall picture including the abovementioned reasons, it may be said that these figures are conservative.

C&A expects Net sales of 5,500 million yen (+69.0% YoY); Operating income of 280 million yen (+428.3% YoY); Ordinary income of 75 million yen; and Net income of 150 million yen (increased from 45 million yen (as of Jul/2/2018)).

During the current term, renewable energy business segment as the second pillar has steadily contributed to the Company's overall earnings. Goto station (5.3 MW), the largest one among the Company's installations, has also so far achieved more performance than expected and will contribute fully during the current term. From November, mega-solar station at Noboribetsu City (2.0 MW; FIT of 40 yen) has also started selling electric power. Further, extraordinary income of 136 million yen from selling the station at Kasumigaura City will be allocated, thereby increasing net income.

Note that these performance forecasts are absolutely as of December 12, 2018.

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【Performance analysis of the previous term (FY03/2018)】

Financial results of the previous term (FY03/2018) were as follows: Net sales of 3,255 million yen (-26.7% YoY); Operating income of 53 million yen (-71.9% YoY); Ordinary loss of 63 million yen (for comparison, ordinary loss of 170 million yen in FY03/2017); Net loss of 146 million yen (for comparison, net loss of 190 million yen in FY03/2017), meaning decrease in both revenues and earnings. This is mainly due to significant delay in administrative procedures in the Ministry of Economy, Trade and Industry, following revision of the Feed-in Tariff for renewable energy.

Looking into each segment, results of electronic & communication devices business segment were: Net sales of 2,626 million yen (+0.81% YoY) and Segment income of 225 million yen (-8.5%), meaning increase in revenues and decrease in earnings; results of renewable energy system sales business segment were: Net sales of 277 million yen (-83.3% YoY) and Segment loss of 108 million yen (as opposed to segment income of 110 million yen in FY03/2017), meaning decrease in both revenues and earnings; results of renewable energy power station business were: Net sales of 345 million yen (+51.7% YoY) and Segment income of 115 million yen (+58.1% YoY), meaning substantial increase in both revenues and earnings; results of geothermal station business segment were: Net sales not allocated and Segment loss of 14 million yen (for comparison, segment loss of 0 million yen in FY03/2017), meaning decrease in earnings.

It is particularly worth noting that renewable energy power station business segment (revenues from selling electric power) achieved 1.5 times greater Net sales and Segment income than FY03/2017, substantial increase both in revenues and earnings, that means construction of self-owned photovoltaic stations surely pushed up the Company's profitability.

Although financial results of the previous term were decrease in both revenues and earnings for the Company as a whole, this was mainly due to external factors and it is surely anticipated that revenues by the projects carried over from the previous term would be reflected on the results of the current term. Moreover, Goto mega-solar station with 5.3 MW output (linkage (selling electric power) started Mar/30/2018) will fully contribute to the 12 months accounting and therefore viewing only actual results of the previous term would cause significantly incorrect judgment for the future.

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【Important Points】

- ① **Revenues from selling electric power increased by 50% YoY in the previous term, and will double in the current term.**

Since 2013, TAMAGAWA HOLDINGS has started full-scale renewable energy business. Currently, the Company owns eight (8) photovoltaic stations. At the end of the first half of FY03/2019, annual total generation was about 16.7 MW, namely increased by 5.8 MW from 10.9 MW at the end of the first half of FY03/2018. Net sales of renewable energy station business in the current term is projected to almost double as 665 million yen, namely increase by 92.8%, 319 million yen from the previous term. Revenues from photovoltaic station business are based on the Feed-in Tariff for renewable energy, assuring longstanding stable revenue base.

- ② **50 parcels of land, about 3,300 m² on average in Tohoku/Hokkaido regions.**

The Company has obtained rights to sell electric power generated at 50 locations of small-scale wind power generation business (as of Feb/23/2018). FIT price of these rights is as high as 55 yen and this has fallen to 20 yen since April 2018, so simply selling them would create much premium. In addition, these 50 parcels are located at coastal areas of Tohoku/Hokkaido regions where westerlies blow, so they may be considered as ideal locations for wind power generation. Also, each of them is as large as 3,300 m² on average, 165,000 m² in total, so its new business making effective use of these lands can be much anticipated. In the days ahead, making effective use of these lands has some explosive potential for mid-term growth.

【Notable Points for the Future】 (as of Dec/20/2018)

C&A thinks the following points are worth noting for the future.

- ① Business development of 50 locations with rights of small wind farm and SPC
- ② Timing and impact on business performance of practical realization of 5G
- ③ How future fluctuation of FIT price would affect the Company's strategies
- ④ Expansion of the factory in Vietnam and order-taking of overseas projects
- ⑤ Trends in interest rates and how to raise funds

【Opinion on share price】 (as of Dec/20/2018)

C&A continues to set the rating as "Buy", for reasons as shown below.

- ① Renewable energy business segment recovered its performance by substantial increases in both revenues and earnings, and is expected to provide stable profitability for longer period.
- ② Extraordinary income of 136 million yen from selling the station at Kasumigaura City will be allocated to the next 3Q.
- ③ There may be some implications of obtaining rights at 50 locations for small wind power station and anticipation for making effective use of land.
- ④ From the first half of the next term, there would be some impacts on the performance due to 5G-related business to be in full-scale.

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【Basic information】

Company name: TAMAGAWA HOLDINGS CO., LTD.

Address: VORT Hamamatsu-cho 2F, 1-6-15 Hamamatsu-cho,
Minato-ku, Tokyo, 105-0013, JAPAN

Securities code: 6838

Share price: 594 yen (Dec/19/2018, 15:00); Unit of exchange: 100 shares;

Total market value: 2,616 million yen;

Year-to-date high: 1,210 yen (Jan/16/2018); Year-to-date low: 560 yen (Dec/19/2018);

Listed shares: 4,404,600; Expected dividend yield: 0.84%; Expected dividend: 5-30

Valuation Expected PER: 184.47 times; Expected EPS: 3.22 yen

Actual PBR: 0.83 times; Actual BPS: 715.38 yen

Investment index ROE: -4.5% (FY03/2018 actual); ROA: -0.7% (FY03/2018 actual)

Financial position (FY03/2018 end): Equity ratio: 28.7%

Auditing corporation: Kainan Audit Corporation; Lead managing underwriter: SMBC Nikko

unit: million yen

	Net sales	YoY	Operating income	YoY	Ordinary income	YoY	Net income	YoY	EPS (yen)	Dividend (yen)
2016/03	7,260	42.5%	279	-47.5%	211	-58.9%	165	-61.4%	4	15
2017/03	4,443	-38.3%	189	-32.3%	106	-49.8%	45	-72.7%	1.1	10
2018/03	3,255	-26.7%	53	-72.0%	-63	-	-146	-	-4	5
0219/03 (Co.,E)	5,186	59.3%	239	350.9%	22	-	14	-	0.3	5-30
2019/03 (C&A_E)	5,500	6.1%	280	17.2%	75	240.9%	150	971%	3.4	15
2020/03 (C&A_E)	6,000	9.1%	400	42.9%	350	366.7%	200	33.3%	4.5	20

【Business overview】

Electronic & communication devices business and renewable energy related business are the principal business activities.

Electronic & communication devices business segment is specialized in a rare technologies field, namely analog high-frequency radio technologies, and has developed business along with its world's highest quality level, long years of achievements and trust. This segment is operated by TAMAGAWA ELECTRONICS, one of wholly-owned subsidiaries.

Renewable energy related business segment has turned to full scale development phase since 2013. TAMAGAWA ENERGY CO., LTD. is responsible for renewable energy system sales business (selling photovoltaic/wind power stations); and GP ENERGY CO., LTD. is responsible for photovoltaic station business (selling electric power generated by self-owned stations). The Company established TAMAGAWA ELECTRONICS CO., LTD., became an over-the-counter company in 1999, and became a holding company in 2007.

Rating criteria

Ratings are given based on the criteria as shown below.

Buy

Share price is expected to outperform TOPIX by 10% or more within one year.

Neutral

Share price is expected to vary in the range less than +/- 10% of TOPIX within one year.

Sell

Share price is expected to underperform TOPIX by 10% or more within one year.

Points of concern

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