

Developing the business with three 're-s', electronics and communications equipment and renewable energy businesses are the growth engines

Continuing with solar power generation as well as developing geothermal power generation business, progressing strongly as these businesses become fully viable

Market Capitalization: ¥9.6 billion

Share Price: ¥231 (January 6) Estimated Range (one-year) ¥220 – ¥430 2014 high ¥457/low ¥153



Source: Yahoo! Japan Corporation
Source: Yahoo! Financial (weekly basis over past two years)

Total Number of Shares Outstanding: 41,865,000 shares

Projected/Forecast EPS (FY15/3) ¥10.9

Projected/Forecast PER 21.2 times

Actual BPS (FY14/9) ¥67.8

Actual PBR (FY14/9) 3.41 times

Current financial year forecast dividend per share ¥1.0

Projected/Forecast dividend yield of 0.43%

Foreign shareholding ratio 34.8%

Cash flows (14/3)

Operating cash flow ¥764 million
Investing cash flow -¥265 million
Free cash flow ¥499 million
Financing cash flow ¥875 million
Cash and equivalents, etc ¥1,763 million
Interest-bearing liabilities ¥617 million
Depreciation and amortization (14/3) ¥86 million
Gross margin (FY14/9) 32.1%

Company Profile

Established: November 1968
Listed: August 1999
Number of shareholders: 1,321 (end - 14/9)
Number of employees: 131 (end - 14/9)
Head office: 1-6-15 Hamamatsucho, Minato-ku, Tokyo
President and Representative Director: Toru Masuzawa
Representative Director: Masanori Kobayashi

Executive Summary

~ Working vigorously towards new growth with management renewal ~

In the era in which Japan's electronics industry was displaying rapid growth, Tamagawa Electronics YK was established as a development company for the attenuators and other electronics components that were needed to support this process. The foundations for the Company's business lay in the high-frequency circuit elements, measuring equipment, and communications equipment needed for wireless telecommunications equipment applications. As a result of the stable and sustained growth it continued to achieve in this business, the Company's shares were registered on the OTC market in August 1998, 31 years after it had been established. The analog high-frequency technologies that it has developed since its establishment have been passed onto today's business, and they are still widely used in products for applications in various fields including public works, etc. Following its OTC registration, the Company attempted to secure growth by expanding orders for mobile phone related devices, but in FY2002/3 it tumbled out of profitable operation and recorded a loss of over ¥300 million. It subsequently remained in the red on annual turnover of around ¥3 billion over the course of the following years.

In an attempt to improve this situation the previous management team embarked upon a biomass energy business, in the wake of the Lehman shock, in 2010 but this ended in failure and in 2012 the current management team took over the running of the Company. Under the current management team, which is focused on finance, the Company has moved towards recovery and with the implementation of the Renewable Energy Act in 2012 providing it with a new source of earnings potential, the Company moved into the black in FY 2013/3 thanks to the adoption of a new approach to management based upon emphasizing profitability and achieving it by means of consolidation and electing to adopt a fixed-price purchasing structure. The Company is expected to record growth in both revenues and earnings in both of the following two financial years to date. Moreover, the company is expected to record a new all-time high for earnings in the current term and intends to resume payment of a dividend, albeit small, at the end of the current fiscal year. Furthermore, with the implementation of the Renewable Energy Act in 2012 providing it with a new source of earnings potential, and by embarking upon a solar power generation business exploiting a fixed-price purchasing structure, the Company is planning to make great strides by acquiring a highly profitable stock business with long-term stability. The company's key principle is 'business investment', and by acting in accordance with this ideal it is returning earnings to regional communities across Japan, and aims to promote a recycling oriented society to encourage the revitalization and development of regional economies. The company has planned to raise its corporate value by means of corporate revitalization, but also to contribute to society by furthering the diffusion of solar power, geothermal, biomass, and other sources of renewable energy. The growth in the earnings generated from these areas is, in turn, being reinvested and anticipated that this will be highly evaluated in the future by the stock market as it starts to result in a virtuous cycle of expansion and improvement.

Unit (1,000 yen)	Net sales/revenues	YOY	Operating income	YOY	Current/recurring income	YOY	Net income	YOY	EPS
2012.3	3,106	17.7%	-29	-	-23	-	-37	-	-
2013.3	3,671	18.2%	373	-	374	-	339	-	15.7
2014.3	4,171	13.6%	477	27.8%	478	30.4%	436	28.5%	11.7
2015.3E	4,534	8.7%	506	6.1%	489	2.4%	450	3.2%	10.9
2016.3E	5,800	27.9%	810	60.1%	800	63.6%	720	60.0%	13.9
2017.3E	7,300	25.9%	1,120	38.3%	1,100	37.5%	780	8.3%	15.0
2018.3E	10,000	37.0%	2,100	87.5%	2,000	81.8%	1,200	53.8%	23.1

■ Valuation ~ Stock price set to rise in tandem with the increase in earnings ~

From a public offering price of ¥1,600 at the time of its OTC registration in August 1999, the share price subsequently rose to reach a high of ¥4,390 and a market capitalization of ¥23.8 billion. Against a background of growth expectations the share price was highly valued but the subsequent decline in the Company's business results ushered in a long-term decline in the share price. The price temporarily hit a bottom in 2002 and then, in the period from October 2004 to February 2009, the decline in the company's business performance became particularly conspicuous and resulted in a sharp declining trend and a pre-3:1 stock split low of ¥78 for the share price. The market capitalization at this time declines to just over 400 million year. Subsequently the Company undertook a 1.31 million-share third-party allocation capital raising in 2010 (issue price ¥110), and plans to rebuild its financial structure thanks to the 2013 1.0 1 million share third-party capital raising (issue price ¥130) and the issuance of warrants for new shares. It conducted a 3:1 stock split in March this year so as to improve the liquidity of its shares. The total number of shares outstanding as of the end of September 2014 was 41,865,000 shares, and the market capitalization reached ¥10 billion. The Company's pre-listing recurring/current income peaked at ¥455 million, but recorded a new all-time high for earnings on this measure in the previous financial year. The Company is also undertaking new financing to funds the development of its solar power generation and geothermal power generation operations. The company also has great expectations for its performance in the current financial year and thereafter in its electronics and communications equipment for next-generation telecommunications infrastructure equipment and renewable energies businesses, and it is anticipated that the share price will rise in tandem with this improvement in its earnings and that the market capitalization of the company will also expand accordingly.

Developing the business with three 'returns'

- 1 Raising corporate value by renewing the company ... Management reform at Tamagawa Electronics
- 2 Getting to grips with renewable energy Solar power generation systems sales business and solar power generation plant business
- 3 Reinvestment of profits generated

The Company has revived Tamagawa Electronics and its accumulated knowledge of the analogue high-frequency technologies that are indispensable for electronics and communications equipment. It continues to remain in the black and to achieve its aim of recording high profitability, and it is striving to attain growth in the renewable energy business that it is newly developing. The appointment of current president Masuzawa as representative director in 2012 has seen the company achieve a transformation in its management practices in terms of opting for integration and consolidation, and delivering speed of management decision-making. Since returning to the black in the financial year to March 2013, the company now expects to achieve growth in both revenues and earnings for the second consecutive term in the current financial year.

The nuclear power plant accident caused by the Great East Japan earthquake of March 2011 has focused a great deal of close-up attention on solar power and other forms of natural energy-related businesses. Since announcing its new move into the business of selling solar power generation systems in February 2012, the company has made progress towards the development of a promising electricity sales business, which looks sets to be able to deliver stable earnings by means of the implementation of a fixed price purchase system. The company is already showing signs of broadening the range of its operations out from its current focus on solar power into areas such as geothermal power generation and even into biomass. Consequently it is attracting a great deal of attention for its positive drive to pursue profits whilst reinvesting its earnings, derived from this full-scale launch into renewable energy, back into this area.

**Tamagawa Electronics-
high-frequency wireless technologies**

In the midst of the advent of a period of renewal in the social infrastructure that has been built up in the post-war period, it is widely expected that the profile of Tamagawa Electronics, which might formerly have been described as playing a supporting role, is currently on the rise. The company is currently displaying an ability to meld the sector-wide top-class analog high-frequency technologies that the company has developed since its establishment, with modern digital technologies. In tandem with the diffusion of smart phones and other similar items, there has been a surge in demand for speed and greater capacity in the field of data communication. High-frequency technologies are contributing to achieving the goals of raising transmission speeds, providing high-volume data telecommunications capabilities and distributing video contents that are indispensable factors in this process. Thanks to the accumulated know-how in development and production technologies possessed by its in-house staff, Tamagawa Holdings is widely recognized by a large number of major companies in the sector as being a company that possesses technology that it would simply impossible for its rivals to attain similar levels of prowess in quickly. President Kobayashi has played a key role in raising the profitability of the company at the heart of its management and he has served in his current role as Representative Director of Tamagawa Holdings since June 2014. Together with presidents Masuzawa he is very keen to pursue growth in earnings for the Group.

[Major customers]

Nippon Electric, Panasonic, Toshiba, Mitsubishi Electric, Hitachi Kokusai Electric, Government administration offices, Chugoku Electric Power, NTT DoCoMo, Softbank Mobile, Fujitsu, KDDI, Japan Radio (JRC), and various research and development organizations

Also expanding into disaster prevention wireless

[Tamagawa Electronics product lineup]

- 1 Device equipment** ... High-frequency circuit elements for communications equipment such as distributors, attenuators, terminals, oscillators, and RF filters/duplexers, etc.
- 2 Systems equipment** ... Proprietary products such as high-frequency amplifiers, synthesizers, microwave power transmission and reception equipment, and OEM products

Tie-up with major Korean manufacturer

Competitor companies and sales in the high-frequency wireless field

* 1: Overall sales *2: High-frequency wireless

(Unit for sales is yen 100 million)

Company name

* 1 *2 field

Ace (Korea)	Mobile
K MW (Korea)	Mobile
Nihon Dengyo Kosaku	Mobile
Stack Electronics	Broadcasting
Antenna Giken	Public

Works/disaster prevention

(Source: Company materials)

Also making progress with plants in Vietnam

The range of devices and systems equipment products that Tamagawa Electronics deals in extends from 30MHz right up to 30GHz, and these are used in next-generation mobile, satellite telecommunications, ETC, digital TV, FM broadcasting, public service and disaster prevention wireless, and marine and aviation control systems, etc. the increase in the number of mobile telephone base stations has contributed to the expansion of the company's business results in this area, but it is also aiming to expand its business results steadily by means of directly selling proposals, on the basis of products and technologies that the Group has developed in-house by means of its own proprietary research and development activities, to its clients, who include major telecommunications operators and manufacturers of electronic and electrical equipment. 44% of the company's revenues in the previous fiscal year were accounted for by sales to the base stations of mobile telecommunications operators, with the remainder being accounted for by 28% to defense-related purchasers, and is 28% to public works and disaster prevention applications. Tamagawa does not have an excessive reliance upon the fiercely cost competitive field of mobile communications, and the expansion in sales of its own proprietary, in-house developed products means that it is continuing to build up a highly profitable earnings structure.

In tandem with the rapid rate of diffusion in mobile telephones, there has been a surge in construction of base stations with all carriers being actively involved. The Company recorded very solid performance particularly in this field in the 1990s when high-frequency filters and other components able to deal with high frequency wireless technologies for these base stations were utterly indispensable to their operation. Subsequently, a fierce price war broke out with manufacturers both in Japan and overseas, notably with two Korean companies (Ace, and KMW). Up to this point the company had maintained a market share of 30% but from 2005 onwards this declined and this factor was directly linked to the slowdown in its business performance. Sellers to overcome these challenges, Tamagawa the entered into an operational tie-up with the Korean operator Ace, which had formerly been its rival, in May 2013, and was thereby able to build a structure which should mean that it will be capable of winning out in competition with its rival companies for the surge in demand for smart phone 4G applications anticipated from 2016 onwards. The contribution from this tie-up has been substantial and Tamagawa continues to be able to heavily reduce its production costs from previous levels by exploiting the manufacturing facilities of Ace. Simultaneously, it has also become possible to shorten lead-times by securing production capacity and so it is in an excellent position to undertake contracted production of filter components for 4G base stations that are expected get to fully underway and have been planned for 2016 onwards. This contribution has already started to appear and has been evident since the second half of the previous fiscal year, and with low price proposals proceeding smoothly the Company's market share should also expand accordingly.

The company has a structure in place to further exploit plants in Vietnam to produce device products four which demand is anticipated from the mobile communications sector. Consequently the plan is to establish a local office in the country at the end of March 2015 with the plan being to increase cost competitiveness further as a result. The possibility also exists of selling products manufactured in Vietnam in the future 3.9G mobile communications base stations in the US where the diffusion rate of such products lags behind that of Japan. By specializing on the development and manufacture of high-end products in domestic factories in Japan, Tamagawa will be highly evaluated four having constructed a corporate base that is able to fend off competition by exploiting the use of overseas production facilities.

[Major products developed through R&D]

1 Rack-mounted optical converters -> miniaturization, implementation of broadband frequency systems,

2 Programmable attenuators (attenuators)

-> Miniaturization, weight reduction, implementation of broadband

3 Attenuators, terminals, directional couplers, and various RF devices -> expanding frequency areas, expanding electric power areas

4 Microwave capturing equipment -> new products, real-time high-speed data transmission of waveform data

Aiming at own product ratio of 70%

The Company plans to raise the ratio of high-end in-house developed products so as to build up a highly profitable earnings structure, and so it is pressing ahead with research and development activities on the basis of the store of analog high-frequency wireless technology that it has accumulated over the course of a large number of years. In FY2014/3 it achieved very rapid growth as rack-mounted optical converters were used for analogue optical transmissions in various wireless systems for defense, broadcasting and other purposes, and expectations are now high for the development of high-end proprietary products as well. The in-house product ratio was 30% in FY2013/3, 35% in FY2014/3, and is expected to record another steady rise to 40% in FY2015/3. Moreover, the plan is to raise this ratio even higher to the 70% level in FY2018/3. Tamagawa Plans strengthen its ability to offer high value-added, high-end, in-house developed products, and thereby intends to escape from its former operational positioning in which it was vulnerable to fluctuations in the market environment.

Much of the company's technology is effectively stored in its staff resources, and so we believe that it is indispensable for its future growth that the company is careful to train and reward its employees appropriately. Moreover, according to Patent Office data, Tamagawa has filed 25 patents applications over the course of the past 20 years, but many of these patent applications have not been granted, and so remain pending with the possibility that they will never attain patents status, including the possibility of them being rejected outright. But there are now sign that on the patents front too, the management transformation is delivering positive results with the announcement in 2009 of a patent being granted for semiconductor electric transmission testing equipment, and in 2011 and patents being granted for semi-coaxial equipment and for filters.

Developing high-speed digitizer boards

The Company is developing high-speed digital support for particle physics research institutions by using applied technologies for analog high frequencies and digital signal processing, and for digital high-speed transmission, etc. the company is currently striving to develop generic products in this area and expects to commence sales of them in the future. Potential purchasers would largely be high-energy acceleration equipment research institutions, and physics research institutes, etc. but it is possible that several other applications may also exist for them. Tamagawa also plans to expand sales into the automobile sector in the future and expects to records and in-house produced product ratio of 70% with its excellent products. Moreover, the Company is developing testing equipment (product name: Ba-in equipment) with a high degree of long-term reliability for power semiconductor applications in the space and satellite fields. A single system costs several tens of millions of yen and so it is a very expensive product, but with demand for energy conservation, and in response to environmental restrictions, rising there are great expectations for products in this area.

Security related products attracting attention

'Hi-vision image optical transmission equipment', which has been jointly developed in association with regional universities, is a highly promising product produced by the Company that, by means of the fusion of milli-wave wireless technology with highly compatible analog optical transmission technologies, that makes it possible to transmit large volumes of high definition images over large distances without compression and across a wide range of frequency bands. It is being seen as an indispensable product for crime prevention measures to protect mega-solar cables that are increasingly frequently being stolen from solar power plants against theft, and the company has also decided to install them at its own power generation plant with which progress is currently underway. The Company is also adopting a positive stance towards planning marketing proposals on this basis.

Aiming for sales of ¥50 billion

The forecast for Electronics and communications equipment business sales in the current financial year is ¥3.4 billion, but thanks to the creation of this new market, it is anticipated that sales in FY2016/3 will be ¥3.7 billion, FY2017/3 will be ¥4.3 billion and that stable growth will continue. Moreover, the company plans to record sales of ¥5 billion in FY2018/3. The business foundation in sales of applications for Mobile telecommunications devices is stable, and the prospects for expansion into other areas of demand such as defense, government and public sector wireless, transportation, the environment, and security looked promising, as do those for the company's entry into the US market for mobile telephone base station applications, and the company's policy is firmly fixed on achieving its sales projections.

Renewable energy business expanding

Trend in fixed purchase prices by financial year

July 2012→¥40/kilowatt hour
 2013¥36/kilowatt hour
 2014¥32/kilowatt hour
 2015 (est.)¥28/kilowatt hour?

[Trends in solar power generation business]

- 1 Project construction
 Explanation written estimates/quotations, income and expenditure planning, electric power systems/networks, applications for equipment/installation approvals, etc
- 2 Contracts
- 3 Undertaking works projects
- 4 Completion of solar power generation systems
- 5 Related works
- 6 Commencement, management, and reporting, of sales of electrical power

Megasolar market expanding

Looking ahead to expanding sales of self-marketed electric power

Accumulating operating know-how

Company's power generation subsidiary companies

- GP Energy Co., Ltd.
- GP Energy 2 Co., Ltd.
- GP Energy 3 Co., Ltd.
- GP Energy 3-A Co., Ltd.
- GP Energy 5 Co., Ltd.
- GP Energy 6 Co., Ltd.
- GP Energy A GK
- GP Energy B GK
- GP Energy C GK
- GP Energy D GK

The rate of growth in the electronics and telecommunications equipment businesses are also expanding. Whilst expectations for further business expansion in the future are largely concentrated on the renewable energy operation and on solar power generation in particular. The issue of radiation contamination has resurfaced as a result of the accidents at the Fukushima nuclear power plant following the great East Japan earthquake of March 2011. This has resulted in a significant degree of impetus being placed behind a public and private sector drive to overcome the challenges of renewable energy sources, and of solar power in particular.

The passing of the Renewable Energy Special Measures Act in July 2012 brought about the initiation of a fixed price system for electric power. In the business world a large number of companies headed by Softbank, have started to display a heightened degree of interest in Mecca so in advance of the liberalization of electric power supply from 2016 and are making progress with its commercialization. The company consists of a small of elite specialists with backgrounds in areas such as finance and accounting, but even among a large number of listed companies there is growing interest in getting to grips with this issue. Prospects for future growth will be largely determined hereafter by success or failure in steadily forging alliances with location partners and in planning tie-up with partner companies to sow the seeds for future business opportunities. Finding suitable locations for this business, successfully undertaking negotiations with land owners, choosing solar panels and the power controllers that are indispensable for power generation, acquiring power distribution networks, undertaking supervision, managing operations, and carrying out maintenance and other activities will require various kinds of know-how related to development and operational control, but will also allow Tamagawa and delete exploits its rich store of experience in the project finance area in which it is so strong.

The size of Japan's solar systems market is estimated to be approximately 8 GW on an annual installation volume base. To date, most of this has been for domestic use solar power, and has been dominated by small-scale installations of 1 MW or less but, according to the Japan Photovoltaic Energy Association (JPEA), although domestic use is likely to remain flat and the small scale solar market is shrinking, in the business area in which Tamagawa operates, solar power generation of 1 MW and over, the implementation of the fixed-price purchasing system for solar generated power and the advent of the year prior to the holding of the Tokyo Olympics is expected to result in expansion in the scale of the market.

The company's renewable energy business consists of the sale of solar systems including electric power generation modules and power controllers, etc., and the electric power generation business which undertakes business development by means of independently securing sites, operating electric power generation plants, and by subsequently selling the electricity that it generates. Given the current expansion in the scale of the market, the company expects to record growth of 14.6% in sales of systems in the current financial year to ¥1.02 billion. Moreover, it expects to record sales of electricity from the solar power plants that it operates of ¥114 million in the current financial year which represents year-on-year growth of 121.1%, so although the scale remains small at present the rate of growth is expanding rapidly.

In its solar power systems sales business, the Company has accumulated systems installation know-how suitable for a wide range of customer needs including car parks, mountain and forest locations, and logistics warehouses, etc. Tamagawa has a joint project (applications already made for 27 electric power generation plants, 76.5 MW), on a nationwide scale, with ISE Power with whom it arranged a business in May last year, in the offing and anticipates that this will make a sales contribution to systems sales as well as contributing to sales of various types of support businesses over the course of the next several years.

Moreover, in the solar power generation business too, Tamagawa has been successful with its plans for a 1.6MW scale electric power production facility in Shimoseki City, which became its first project of its own to start selling electricity on June 22, 2013 (electricity sales price ¥42/kWh), and has gained valuable operational know-how as a result. It is currently awaiting the commencement of electric car sales at its independent power generation plants in locations including Minami Shimabara, Sodegaura, Tateyama, and Gotoretto. These are all 20-year stock businesses, and it is anticipated that they will deliver stable earnings contributions. The commencement of operations at the Misawa plant (about 10M) from the next financial year onwards is expected to result in a rapid expansion in sales, and it is anticipated that margins may also rise because of the higher IRR (internal rate of return) resulting from capital freed up by the use of leasing.

Business operations tie-up with ISE Power

[Aims of business tie-up] Operation of

- combined/shared/integrated megasolar power generation plant/plants
- 1 Ise Foods Group's site provision
- 2 Provision of equipment/installation rights for solar power plant owned by President Akimoto's company
- 3 Provision of compositional/constitutional and operational knowhow for company's Shimoseki solar power generation plant

Tamagawa announced that it had entered into a capital and business tie-up with ISE Power Co., Ltd. (Representative Director Yukihiro Akimoto) in May 2014. ISE Power's Chairman Ise is also the owner of the Ise Foods Group, the largest supplier of hens' eggs in Japan and the owner of a large number of landholdings in Japan, and is extremely interested in the solar power production business. As a result of this relationship with the company it was decided to enter in to an operational tie-up. Subsequently, the capital tie-up was dissolved but the business tie-up with Tamagawa, with its rich store of knowhow in operating solar power plant, remains intact, and it is expected that the mega solar project will be rolled out on sites owned by the Ise Group (approximately 1.42 million m², 57 power generation plants) right across Japan in the future. There are currently 27 sites in 10 prefectures with a targeted total power generation output capacity of 76.5Mw (electricity selling price ¥36/kWh) for which applications have already been submitted.

Raising ¥2.1 billion of capital by issuing warrants for new shares to influential foreign banks

At a Board of Directors meeting held on December 26, 2014, a resolution to commence a geothermal binary electric power generation operation (125Kw) capable of exploiting an existing source in Beppu City, Oita Prefecture, as a new business (to be operated by GP Energy 6) was approved. With a purchase price of ¥40/kWh the scale is small but it is expected that this business will generate stable earnings over the course of the coming 15 years. Moreover, it was simultaneously announced that an issue of warrants for new shares with an option to adjust the execution price was to be made to a global infrastructure fund owned by the major foreign bank Macquarie. The exercise price is ¥218 (no upper limit, lower limit exercise price ¥153), and if all of the warrants were to be exercised at this price a maximum of 10 million new shares would be issued, raising over ¥2.1 billion in capital. Three France will mainly be used for the repayments of borrowings used to acquire the site of the Misawa electric power generation plant, and it is scheduled that financing and loans will be provided to the four consolidated subsidiary companies that are to own the Misawa electric power generation plant. Additionally, it is anticipated that financing and loans will be provided to the consolidated subsidiary companies that own the Beppu geothermal power generation plant and the Minami Shimabara plant. As a result, Tamagawa will proceed with a smooth development of its renewable energy business into the future, and it is expected that it plans to achieve expansion in its earnings from this area.

Strong sales of electronic and communications equipment

The interim bookclosing for the first half of FY2015/3 saw sales of electronics and communications equipment increase 26% year-on-year with strong sales of ¥1.741 billion being recorded for the period. Mobile communications applications showed steady growth, and defense applications also continued to perform well. Testing equipment for power semiconductor applications and other in-house proprietary products grew strongly (up 67.7% year-on-year to ¥6.96 billion). Moreover, sales for the first solar power generation plant, Shimonoseki mega solar, increased 93.3% because of the transition from just three months of operation in the previous financial year to 6 months of operation in the current year. Conversely, solar system sales were affected by delay to the start of construction works caused by a two-month delay in a connection response from an electric company, which resulted in approximately 50% of the anticipated sales of ¥300 million not being able to be booked as revenues, and it is not expected that they will be booked in time for the full financial year bookclosing

[FY2015/3 first half sales by industry]

(Unit: yen million, %)
Sales (Year-on-year comparison)

Mobile communications	544	(+11.2)
Defense	677	(+52.1)
Other	521	(+16.3)
Total	1,741	(+26.0)

Strong financials being maintained

FY2015/3 interim operating cash flow declined from a former level of positive ¥2-¥300 million to minus more than ¥100 million, but there were ¥400 million of sales receivables for the electronics and communications equipment business (because of collection site delays for transactions with a major company), and land purchase costs for the solar mega solar lots for sale in Yokohama totaling hundred and ¥120 million, and so it is anticipated that these will be received in the second half. The shareholders equity ratio rose year-on-year to 66%, and the interest-bearing debt ratio declined year-on-year to 13.4%, and so the basic financial soundness of the company was maintained. Investment in the mega solar operation, which is a stable stock business, will continue, but we anticipate that fundamental soundness of the company's finances will be preserved.

Firm sales plan for second-half

[Quarterly results trends for electronic and communications equipment]

(Units: yen million, %)

FY2014/3

1Q 692 → 2Q 690 → 3Q 853 → 4Q

998 →

1-2Q 1382 → 3-4Q 1847

FY2015/3

1Q 776 → 2Q 965

1-2Q 1741 → 3-4Q (est.) 1659 (-10.2%)

Room for upward revision to full year of business results

[FY2015/3 sales plan by segment

(Units: yen million, %)

	FY2014/3	FY2015/3
Electronics/communications		
	3,229	3,400
(First half	1,382	1,741)
Solar systems	890	1,020
(First half	414	136)
Solar power plants	51	114
(First half	23	45)
Totals	4,171	4,534
(First half	1,820	1,923)

Prospect of current/recurring income of ¥2 billion being achieved in three years time

[Company's past, present, and estimated future business results]

(Units: yen million, %)

	Sales	RP
FY3/1997	3,982	455
FY3/2001	6,765	153
FY3/2002	4,290	▲357
FY3/2014	4,171	478
FY3/2015 (est.)	4,534	489
FY3/2018 (est.)	10,000	2,000

In the second half of the FY2015/3 financial year, the first sale of solar power mega solar real estate lots in Yokohama and the sale of other lots (eight blocks in Nagasaki & Sasebo) went well and double digit growth is anticipated in a turnaround from declining revenues at the interim bookclosing stage so, with fourth-quarter sales of ¥640 million expected to be booked, growth of 14.6% to ¥1.02 billion for the solar system sales business is anticipated for the full year. Moreover, it is expected that solar power generation sales will be 2.5 times larger than those booked at the half year bookclosing and will be 2.2 times higher year-on-year at ¥1.14 billion. Full-time sales for the electronics and communications equipment business are expected to increase 5.2% year-on-year to ¥3.4 billion, but second-half sales expected to be lower than in the same period in the previous year and below sales recorded in the first half of this year, and so the forecast is expected to be somewhat tight. Mobile communications sales benefited from a six-month contribution (¥250 million) in the previous term from the increased price competitiveness deriving from the tie-up with the Korean company Ace, but there will be a full year contribution in the current fiscal year. Some ¥500 million's worth of 3G sales are anticipated, and thanks to stronger proposal marketing activities in the defense and public works area sales in the second half are expected to come in roughly flat year-on-year, and half-on-half at ¥1.847 billion.

For the current fiscal year overall, forward investment in anticipation of medium to long-term business development is a particularly remarkable feature. Capital investment in solar power generation plants is planned to increase 6.4 times year-on-year to ¥1 billion, and capital investment in the electronics and communications equipment is also forecast to rise by 35% year-on-year to ¥1.3 billion. It is also anticipated that there will be an increase in research and development expenditure in this area (from ¥124 million in the previous financial year to ¥201 million in the current financial year) with an eye to making progress into high-end products. Operating income for the business is expected to decline 18.3% year-on-year to ¥370 million, but since sales of high margin in-house proprietary products are being maintained at a strong level, this also looks a little too cautious to us. The operating profit margin in the second half of the previous financial year was 14.4%. The operating margin dipped to 11.1% in the first half of the current year, but adjusting this by adding ¥38 million, half of the ¥77 million fall term increase in research and development expenditure, it appears that the operating margin is being held roughly level year-on-year. On the assumption that the operating profit margin will also be maintained at a similar level into the second half, even adjusting for the increase in research and development expenditure leaves ¥40-¥50 million of leeway for an upward revision to operating income if second half sales are flat on the same period in the previous year (¥1.847 billion) and up from the first half (¥1.741 billion).

Second-half sales of solar systems are expected to be booked in the fourth quarter, and it is anticipated that full year operating profit will be 1.9 times higher year-on-year at ¥85 million and that solar power generation will also record a ¥50 million increase in profitability at the operating level. Consequently there is scope for upward revisions to the rather conservative full term forecasts for both sales and operating profits.

On the basis of the information we have received from the company, we expect that it will record net revenues of ¥5.8 billion in FY2016/3 (of which the electronics and communications business will account for ¥3.8 billion) and recurring/current income of ¥800 million. On the assumption that a high level of EPS is to be expected until the accumulated losses are cleared and also assuming that 100 million new shares will be created, are forecast is for earning per share of around ¥13.9 for the current financial year. Moreover, given that we expect FY 2017/3 sales of ¥7.5 billion (of which the electronics and communications business will account for ¥4.4 billion) and recurring/current income of ¥1.1 billion, we forecast EPS of around ¥15. Furthermore, we anticipate FY 2018/3 sales of ¥10 billion (of which the electronics and communications business will account for ¥5.0 billion), recurring/current income of ¥2.0 billion, and net income of ¥1.1 billion, with striking growth in business results being achieved thanks to rapid expansion in the renewable energy business and stable growth in electronics and telecommunications equipment.

Needs to be valued as a growth stock

Current share price ¥231
Market capitalization ¥9.67 billion
Target share price (3 months) ¥340
Target share price (one year) ¥430 Target market capitalization (one year) ¥17.5 billion

Forecast EPS assumptions:
 FY3/2015 (est.) ¥10.9
 FY3/2016 (est.) ¥13.9
 (FY3/2016 figure is Ambitious Net assumption based on contact with the Company)
 (Assuming issuance of 10 million new shares)

[Assumptions]

- 1 Steady progress being made towards achievement of medium to long-term business results
- 2 No issuance of new shares in addition to recently announced financing
- 3 No alterations in business environment

Comparisons with peer companies

[Business portfolio of peer companies]

- 1 Fuji Electric Industry (control switching equipment, solar)
- 2 Ubiteq, INC. (vehicle-mounted equipment and sensors)
- 3 Adtech PT (LC & semiconductor-use plasma use high-frequency electric power source equipment)
- 4 santec (parts for optical communications applications, and optical measuring equipment)
- 5 Artiza Networks, Inc. (communications measuring equipment for carriers)
- 6 NF Circuits (electronic measuring equipment)

[Peer company comparisons]

(Units: yen, hundred million yen, times, %)
 Share prices as of January 6

*1=Current share price *2=Market capitalization *3=Recurring Profit *4=Dividend yield

Risk factors

Having negotiated a difficult period in the wake of the Lehman shock, the share price appears to be recovering, thanks to continued success being achieved by the current management team with the reorganization of the company, and must be evaluated as being a long-term, stable growth stock, given expectations of growth in electronics and telecommunications equipment and a step-change increase in the renewable energy business. Since the enactment of the Renewable Energy Act in 2012, a large number of listed companies have moved into the renewable energy business, but the level of Tamagawa's operations deserves to be valued as that of a top-class operator in this area given its accumulation of experience and business results. With the sale of future power plants by the renewable energy business already scheduled, long-term growth in revenues and stable cash flows are to be expected.

However although there is some room for upward revisions to both revenues and earnings for the results in the current financial year to March, it looks likely that because of the positioning of forward investment timing, this growth may appear a little sluggish by comparison to that achieved in the previous financial year. However, the contribution to business earnings from the solar power generation business is becoming substantial and can be expected to record strong growth in the next financial year and thereafter. The Company has set targets of ¥10 billion and ¥2 billion for sales and operating income respectively, but, given the current forecasts, the announcement of a new medium-term plan is forecast for the near future. In this report, we have set a one-year share price target of ¥430, and a market capitalization of ¥17.5 billion, on the basis of the average PER (31 times) for 6 comparable companies in the electronics equipment sector.

It is difficult to find companies with operational profiles that resemble that of the company in terms of its engagement in the renewable energy business, but in this report we have attempted a comparison against six companies with revenues of a similar scale in the areas of electronic components, electronic equipment, and mobile telecommunications base station related operations. The ongoing dilution resulting from the March 2014 30% stock split is currently resulting in a market capitalization of approximately ¥9.7 billion, but it is certainly not the case that Tamagawa's share price looks conspicuously high by comparison to the share price levels of the similar companies to which we have compared it, and in fact in the light of the growth that we anticipate for next year and thereafter there is considerable room for it to be upwardly revalued. The issuance of 100 million new shares is anticipated from the exercise of warrants the new shares thereafter, but we also expect that the pace of earnings growth will accelerate as a result of this factor.

Company (code, market)	GSP*1	MC*2	RP*3	PER	PBR	DY*4
Fuji Electric Industry (6654 TSE1)	1566	104.4	5.3	29.9	0.96	1.92
Ubiteq, INC. (6662 JASDAQ)	284	41.4	1.0	65.9	1.25	1.06
Adtech PT (6668 TSE2)	1323	113.6	4.9	39.0	4.72	0.30
santec (6777·JASDAQ)	400	47.8	1.9	16.0	0.63	1.50
Artiza Networks, Inc. (6778 TSE2)	804	76.9	4.1	25.4	1.61	0.62
NF Circuits (6864 JASDAQ)	978	61.3	8.7	10.7	0.92	1.74
Simple average for six companies		74.2	4.3	31.2	1.68	1.19
Tamagawa Holdings (6838 JASDAQ) 231		96.7	4.9	21.2	3.41	0.43
(JASDAQ)				17.1	1.37	1.67

It is possible that the company's main business of high-frequency circuit elements and other electronic components for communications equipment sector applications may be affected by volatility in the economic environment. Moreover, future earnings may fluctuate in response to product obsolescence as a result of technological advances and increased severity in price competition with rival companies. Reductions in the purchase prices in the fixed purchase price system that forms the foundation of solar power generation, geothermal power generation, and other renewable energy businesses, and unforeseen alterations to the price structure itself may be expected to pose risks, as may the possibility of events, such as the suspension of new applications to electric power generation companies from megasolar renewable-energy producers, etc., occurring that have an impact upon the electricity sales business in the future. Moreover, the possibility exists that it may prove to be impossible to secure sufficient growth funding in circumstances in which the raising of the necessary financing for the promotion of the business to become impossible for any reason whatsoever.

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Author of this report: Norihisa Matsuo (Member JSDA) Member/Affiliated Company: Ambitious Net Co., Ltd. <http://www.ambitiousnet.co.jp>
 Compartment Tokyo Chuo 211, 3-24-1 Hatchobori, Chuo-ku, Tokyo 104-0032 Tel: 03-6222-3620/090-3426-7563 e-mail: matsuo@ambitiousnet.co.jp