

Beautifully, For the future

TOYOKOH

Presentation Materials for the Fiscal Year Ended March 2025 TOYOKOH Inc. May 14, 2025



Table of contents

- 1: Company Overview
- 2: Business Overview and Growth Strategy (SOSEI)
- 3: Business Overview and Growth Strategy (CoolLaser)
- 4. Overview of financial results for FY 2025/3 and budget for FY 2026/3
- 5. APPENDIX

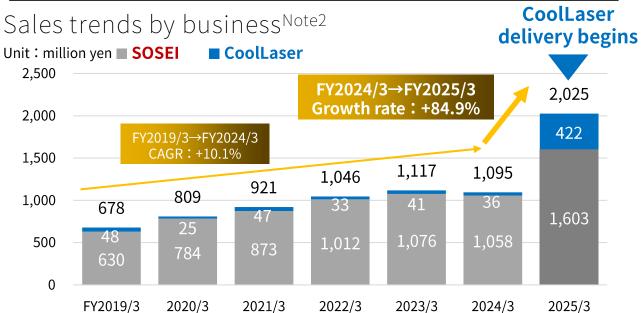
1: Company Overview





TOYOKOH's technology will create an environmentally friendly future for infrastructure maintenance.

Representative Director, CEO	Kazuaki Toyosawa
Establishment	March 1996 (First external capital raised in 2018)
Accumulative capital raised	3,000 Note1 million yen (excluding amount procured through borrowings)
Officers and Employees	48 people ^{Note1}
Base	Headquarters: Fuji City, Shizuoka Prefecture Research Laboratory: - CoolLaser development base (Hamamatsu) - SOSEI Development Base (Fuji) Branch Office: Tokyo, Fukuoka, Okayama



Mission Beautifully, For the future

SOSFI



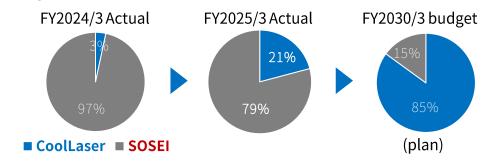
- Development and processing of "SOSEI" which uses three layers of special resin spray coating to restore a strong roof
- A total of 1.56 million m2 of floor space already provided to companies such as major automobile manufacturers^{Note1}

CoolLaser



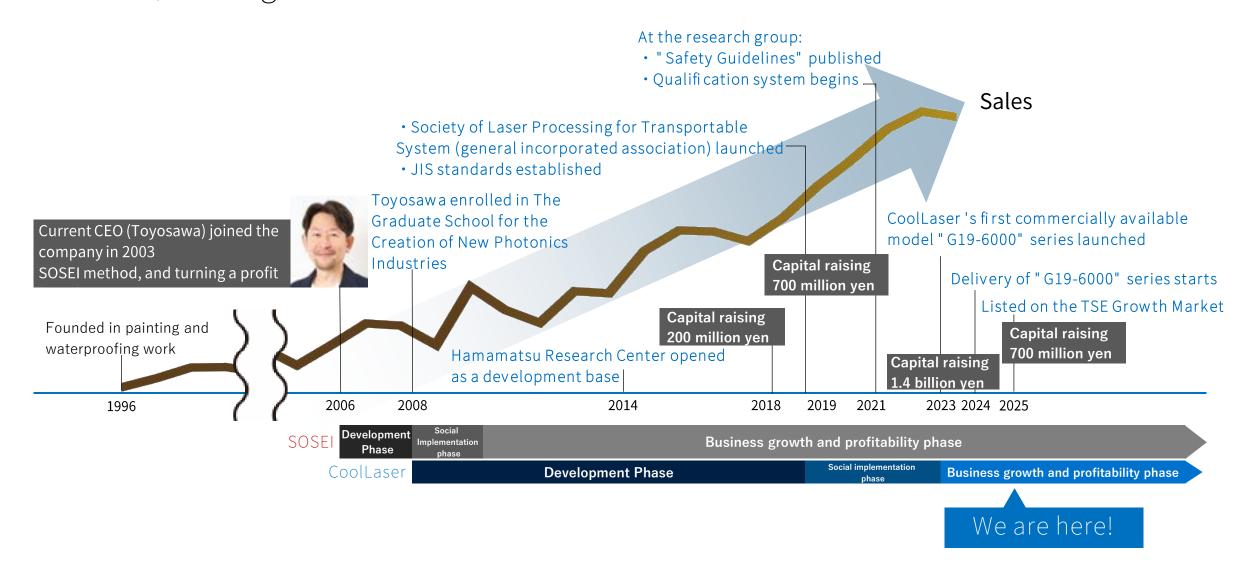
- Development, manufacturing and sales of "CoolLaser" which uses laser to remove rust and paint from aging infrastructure
- Delivery starts in September 2024

Changes in sales composition by business





Funding that began in 2018 accelerated the development of CoolLaser, leading to its launch in 2023.





We have gathered management members with extensive knowledge of optics, construction, and startup management.

A deep tech company Note1 that develops and manufactures "CoolLaser®," a laser construction device made in Japan that boasts the world's highest level of output for outdoor use, in its CoolLaser business.



Kazuaki Toyosawa Representative Director, CEO

The second generation founder of TOYOKOH, he is well versed in the construction industry . Former designer . Creator of the one-of-a-kind technology SOSEI and CoolLaser .



Hajime Shirai Director CFO

PwC and Frontier Management, and is a manager in the IPO division of Deloitte and a certified public accountant.



Kazuhisa Fujita Independent director

Conducted research on laser nuclear fusion, X-ray spectroscopy devices, and space applications of high-power lasers at Osaka University and JAXA. He is also the Vice President and Professor of the Graduate School of Photonics Industries.



Minoru Moriya Independent director

After working at Misumi, he participated in the founding of companies such as Raksul. He has served as a fellow at Hakuhodo and JAXA, and as a member of the Cabinet Office's expert committee.



Noriyuki Suzuki Director COO

Toko (now Murata Manufacturing) He has held important positions at ROHM, NVIDIA, and EDGEMATRIX, and has led sales departments and formulated sales strategies for large corporations and local governments.



Hikaru Sasaki

Full-time Audit & Supervisory Board Member
Worked at Deloitte Tohmatsu in auditing and M&A. After being independent, he provided financial support and accounting consulting, and supported the establishment of financial statements and management systems for companies preparing for IPO.



Hiroshi Abe

Worked at Deloitte
Tohmatsu, where he
provided support for ventures
and helped build
management systems. He
then established a tax
accounting firm and became
its representative partner.
Certified Public
Accountant/Tax Accountant



Fumiaki Kawazoe Auditor

Experienced corporate and tax law at Anderson Mori.
Obtained LLM in international tax law from Leiden University in the Netherlands. Representative and lawyer at law firm Y Cube

Note: When our company borrowed funds from Mizuho Bank, Ltd. in November 2024 to establish a mass production system, as a deep tech venture company certified by the Ministry of Economy, Trade and Industry for its business activity plan for utilizing innovative technological research results, we were selected for the debt guarantee system for facilitating business utilizing innovative technological research results, in which the Small and Medium Enterprise Agency will guarantee 50% of the loan amount.

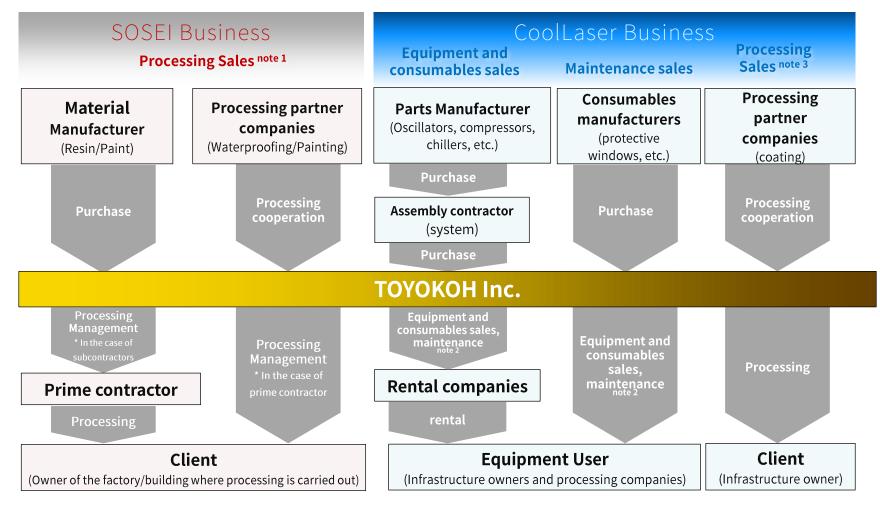


Two unique technologies developed for the maintenance infrastructure industry

SOSEI uses a processing method in which a special three-layer resin is sprayed onto aging roofs.

Our company is responsible for receiving orders, managing the processing and providing services to customers with support from partner companies.

As an equipment manufacturer, CoolLaser sells and rents equipment, and as the number of units increases, it sells consumables and provides maintenance and repair services as ongoing revenue.



Note 1: Processing sales for the SOSEI business are mainly received through prime contractors.

Note 2: Maintenance services for the CoolLaser business will be provided in the future.

Note 3: Installation sales for the CoolLaser business are mainly from test installations to confirm the performance of the equipment.

2: Business Overview and Growth Strategy (SOSEI)





Our proprietary material, SOSEI, solves the problems of aging factories and warehouses and saves energy.

SOSEI protects factory and warehouse equipment and products from various natural disasters, and improves the efficiency of air conditioning inside buildings with the thermos effect Notel of the roof. It contributes to a significant reduction in electricity bills and CO2 emissions, and obtained patent for construction method that balances construction quality and worker safety Note2

Concerns of clients (manufacturing and logistics industries)

Measures against deterioration

We need to protect our buildings and facilities from natural disasters.

Maintain and improving production volume Factory operations cannot be stopped in order to achieve planned production

Cost reduction

There is a need to reduce factory running costs

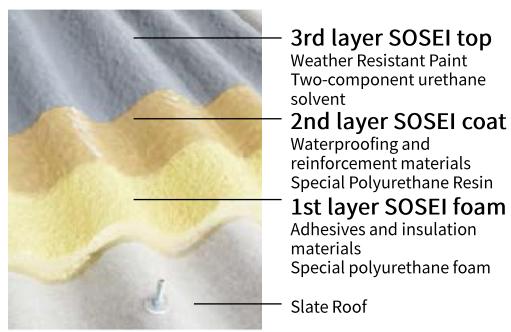
SOSEI can solve all of the above problems at the same time

Waterproofing and reinforcement effects extend the life of buildings

The method does not affect the interior of the building, so the plant can continue operating.

Improved air conditioning efficiency and reduced electricity bills through insulation effect

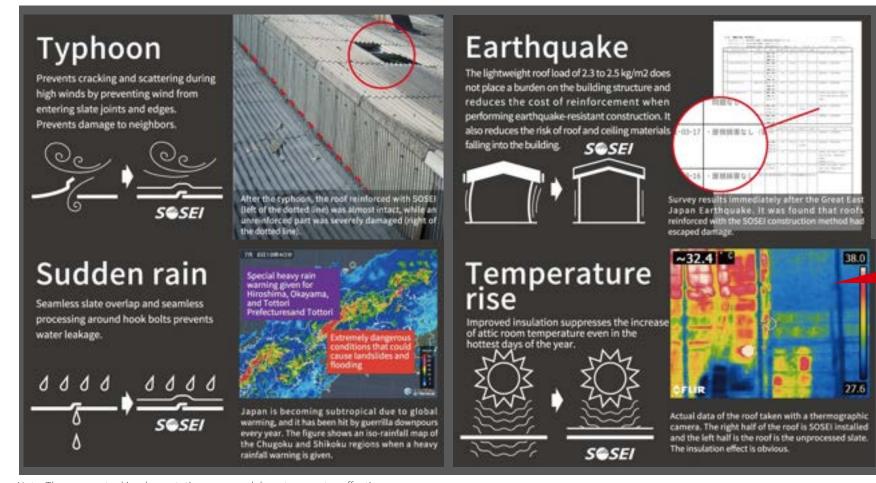
Jointly developed a special three-layer resin with a major chemical manufacturer and signed an exclusive procurement contract



Note 1: The first insulating layer keeps the building cool in the summer, improving cooling efficiency, and in the winter, it keeps the building warm, improving heating efficiency. Note 2: Patent No. 7332142, 6815548

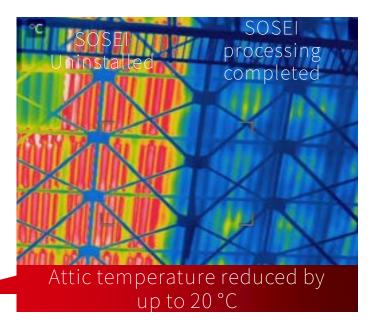


SOSEI contributes to climate change measures



Note: These are actual implementation cases and do not guarantee effectiveness.

Energy saving effect during heating and cooling season



Annual electricity bill 34% reduction
Annual CO2 emissions 112t reduction

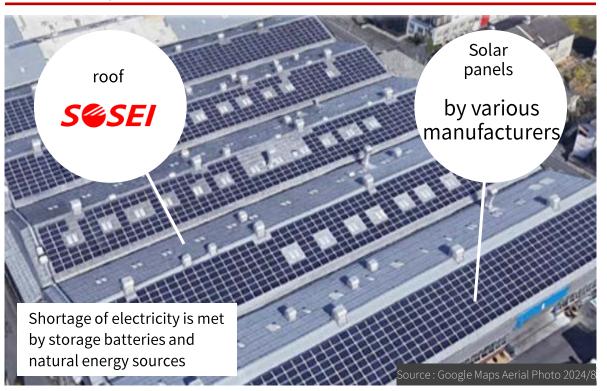
SOSEI was installed in a model building (L48m x W20m x H5m), the difference in heat loss before and after installation was calculated, and the average outdoor temperature, indoor temperature, and operating hours during the heating and cooling season throughout the year were set, and the energy saving effect was quantified from the difference in thermal load.



Even with a weak slate roof It is possible to install solar panels (patent pending).

SOSEI can reinforce slate roofs that were deemed too weak to support the installation of solar panels. It makes it possible to install solar panels will also contribute to achieving zero carbon in factories and warehouses.

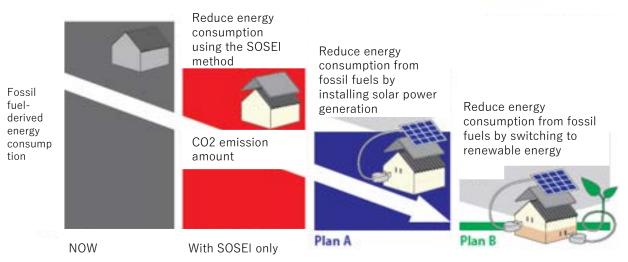
SOSEI + Solar panel installation example (Chugoku region 10,000 m2)



Energy saving Energy Creation Renewable Energy
SOSEI + Solar power generation + Renewable energy
switching

By repairing, reinforcing and insulating deteriorated slate roofs with SOSEI, installing solar panels on the reinforced roof surface, generating electricity and switching over the energy that cannot be met to renewable energy sources, you can contribute to zero carbonization.



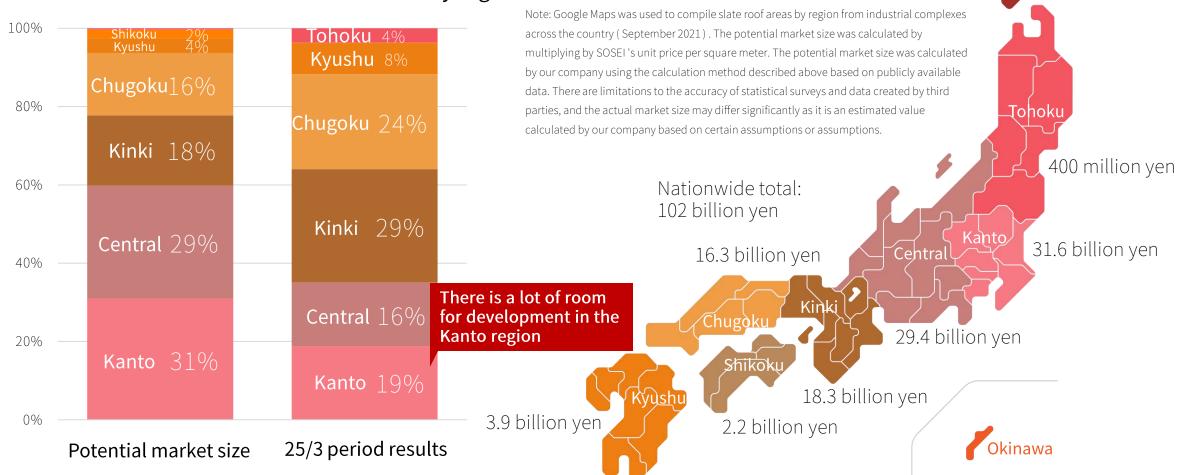


Note: An illustration of the amount of energy used and CO2 emissions

SOSEI's potential market size is large.

SOSEI's main target factories and warehouses are scattered along the Pacific belt.
As collaboration between SOSEI and solar panel progress, further market expansion is expected.

Potential market size and our actual results by region



Hokkaido

3: Business Overview and Growth Strategy (CoolLaser)

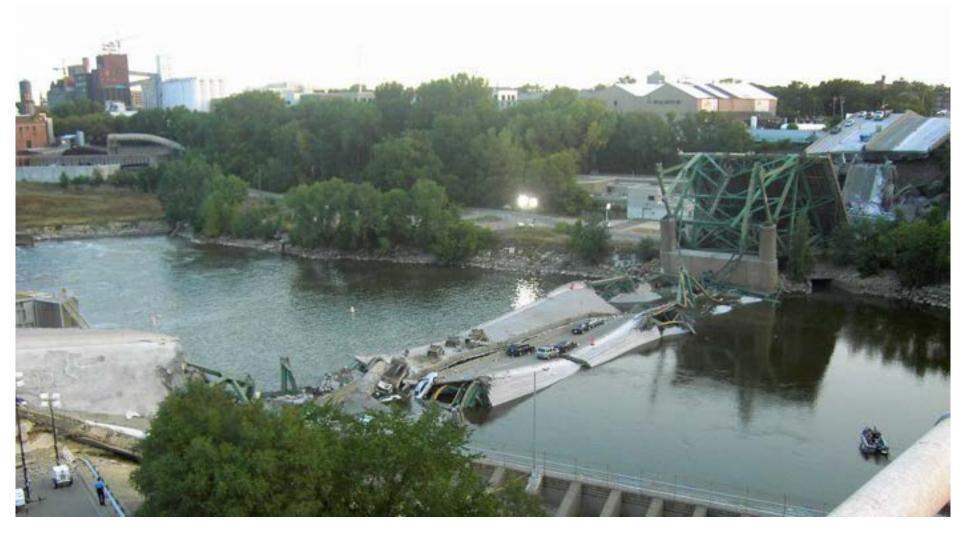




Rust corrosion is causing problems all over the world.

There were many collapses of social infrastructure and fatal accidents.

Fatal bridge collapses occur one after another in the United States and Taiwan. The cause of the collapse is corrosion caused by rust. Aging infrastructure has become a social issue around the world. Currently, rust removal work is considered 3Ds (Dirty, Dangerous, Demeaning) work, and there is a shortage of workers to carry it out.

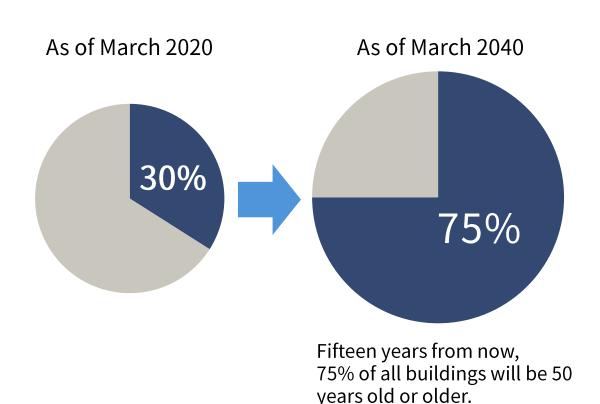


Source: The Minneapolis Expressway collapse accident that occurred in Minnesota on August 1, 2007 (Photo by Mike Wills on August 2, 2007)

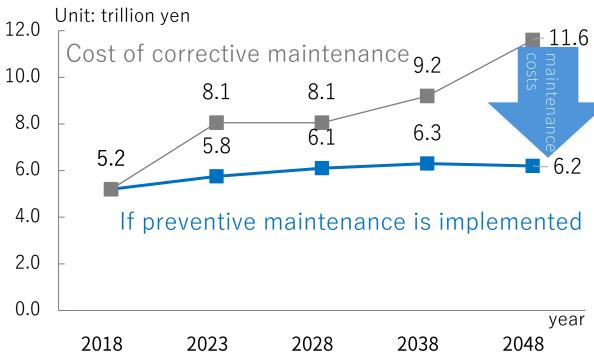


The aging of social infrastructure and preventive maintenance work are likely to increase in the future in an accelerating manner.

Percentage of road bridges that were built more than 50 years ago Notel



Estimates of future infrastructure maintenance and renewal costs Note2



The need for CoolLasers, which are used for preventive maintenance, is expected to continue to increase in the future.

Note 1: October 2023, "Infrastructure management adapting to new ways of living - Towards promoting infrastructure consolidation and reorganization - P.4 Percentage of road bridges (bridge length 2m or more) that have been in operation for more than 50 years

Note 2: Calculated from "Estimates of future maintenance and renewal costs for social capital in areas under the jurisdiction of the Ministry of Land, Infrastructure, Transport and Tourism (November 30, 2018)" based on the difference in maintenance costs for corrective maintenance and preventive maintenance 20 years from now (FY2038).

Laser technology produces no industrial waste^{Note}

Coollaser.

and can even remove the salt that

causes rust to recur.

CoolLaser is the world's highest-class power laser, and can quickly and cleanly remove rust from complex shapes such as bolts, which was previously difficult to remove.

Click here to watch the CoolLaser introduction video.

*YouTube will open



Safeguarding Intrastructure With New Technology (4'47")

YouTube >

Source: Japan Video Topics

"Technology to protect infrastructure"

URL: https://web-japan.org/jvt/

Note: Tomomi Kibata and Yasutaka Sasaki (2016) " Effect of reducing industrial waste containing harmful substances such as lead and PCBs using the Circulation Eco Clean Blasting Method " According to page 2 in https://www.cbr.mlit.go.jp/kikaku/2016kannai/pdf/in05.pdf, blasting requires 40kg/ m2 of abrasive material to remove 1kg/ m2 of paint from 1m2 . The amount of CO2 emissions required to transport industrial waste to the landfill site is 1kg/ m2 for CoolLaser \div 41kg/ m2 for blasting = 2.4%, a 98% reduction compared to blasting.



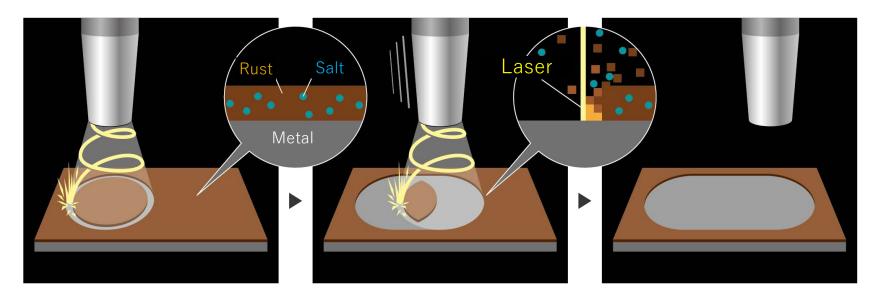


CoolLaser has been granted the IP right in Japan and the US.

This product stands out in the market by specializing in outdoor processing.

Patented technology with ultra-high speed circular irradiation

Patent No. 5574354
US-9868179



CoolLaser is a revolutionary technology that uses laser light to remove paint, rust, and harmful substances from the surface of steel by melting, evaporating, and thermally crushing them, while minimizing the thermal impact on the steel itself by using ultra-high-speed circular rotation scan.

Intellectual Property Rights Status

As at the end of Feb 2025

Unit: item	Domestic	abroad
Already acquired	17	6
Pending	11	5
total	28	11



Differences from general laser cleaning equipment created by unique patented technology.

cicated by	unique patenteu technology.	
	General laser cleaning equipment	Coollaser.
Thermal effects and processing speed	The thermal impact is small, but the processing speed is slow.	Although the thermal impact is large, this is resolved using proprietary patented technology, and processing is fast.
Examples of use	Cleaning of thin metal sheets, molds, important parts. Cleaning of cultural heritage such as sculptures and stone buildings.	Removal of rust and old paint from the surfaces of <u>social infrastructure steel structures</u> <u>such as bridges and steel towers</u> and <u>ships and railway vehicles</u> , removal of radioactive and other harmful substances, etc.
Illustration of laser oscillation	* Uses Pulsed Laser Strength time	* Uses CW (continuous wave) Strength time
Features	Low average power outputLinear Scan Method	High average power outputCircular Scan Method
Advantages	Small thermal effect	 High output is possible and processing speed is fast Can remove thick paint films and rust Oscillators are inexpensive Long-distance transmission possible, enabling processing for a wide range area. The circular scanning method is less likely to result in missing teeth when working handheld.
Disadvantages	 Difficult to achieve high output (maximum 1kW) processing speed is slow, and thick coating and rust are difficult to remove. Oscillators are expensive Long-distance transmission is difficult, making the range of processing limited. The linear scanning method is prone to missing teeth when working by hand. 	CW method has a large thermal effect, but our proprietary patented technology solves this problem.

Confidential All rights reserved. See 2020 TOTOMOTTING.

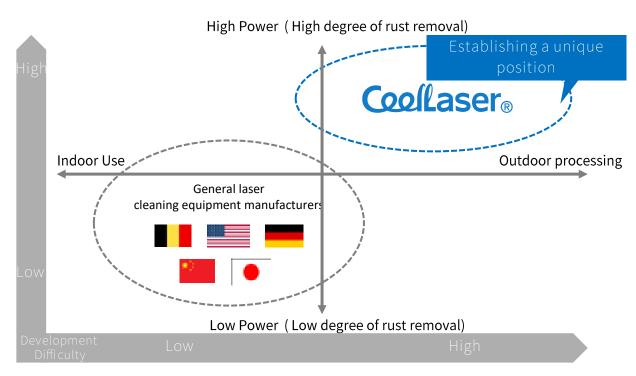


CoolLaser Product Positioning

CoolLaser has established a unique position in terms of high output and outdoor use. Both high output (vertical axis direction) and outdoor use (horizontal axis direction) entail various development difficulties.

Current Position Map Note 1

Note 1: Based on our own analysis and consideration of the websites and catalogs of manufacturers where commercially available products have been confirmed.



Multi-layered difficulty in imitation

- A track record as a front-runner.
- Development began in 2008, and since its global TV broadcast in 2018, there have been over 150 on-site achievements.
- The company holds a construction industry license. It has introduced prototypes to identify issues and reflected them in development.
- The optimal parameters for efficiently and cleanly removing rust have been discovered from tens of thousands of options.
- The patented circular rotating irradiation technology achieves both high output and handiness.
- Society of Laser Processing for Transportable System is working on standardization for social implementation and reflecting this in development. International standardization is also in sight in the future.
- Securing resources and excellent engineers by utilizing startup activities.
- Raising awareness and securing funds through startup activities.
- Engineers gathered from top manufacturers in Japan, a major power in optics.
- Based in Hamamatsu, the city of light, manufacturing with collaborative partners with high technical capabilities.
- Achieved capital procurement from major infrastructure owners and general contractors. Established a strong group of shareholder companies to promote the spread of CoolLaser.

Coollaser.

CoolLaser's first commercial model, the G19, was launched in 2023.
Deliveries began in September 2024.

CoolLaser has launched its second-generation model , which is an improved version of the first- generation model, and is receiving a growing number of orders .

First generation (G18)



- ✓ 2019 and onward: Tested at over 100 premises in our construction sites
- Compared to existing processing methods, superiority in areas such as rust prevention confirmed
- ✓ Identified issues when using on-site. Improved with the second generation



Second Generation (G19)

Improvements from

- Laser output increased from 3kW to 5.4kW. processing efficiency improved by 3 to 4 times.
- Improved safety through strengthened safety mechanisms
- The operation terminal is concentrated near the laser head, reducing labor
- Greatly improved dust collector performance for a cleaner work environment
- Eliminates the problem of oxide film on steel surfaces and improves paint film durability
- The sales price (excluding tax) is in the 100 million yen range.



CoolLaser solves various customer needs and on-site pain points

Major construction equipment rental company

Machine sales

Installs multiple units and rent them to construction companies



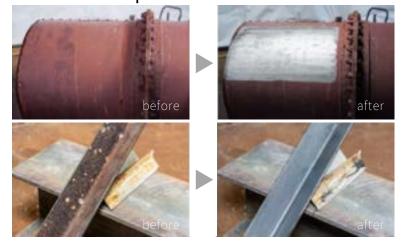
A major construction equipment rental company in the industry has a corporate culture that is proactive in adopting innovative new technologies, and has installed multiple CoolLasers.

The construction equipment rental market is expected to grow in the future, driven by the trend of the sharing economy.

Major electric power group company

Machine sales

Applied to hydroelectric power generation facilities and power transmission towers



By improving the quality of processing work in the maintenance of hydroelectric power generation equipment and transmission line towers, the company hopes to prevent the recurrence of rust and reduce the life cycle costs of infrastructure. In a society with a declining population, the introduction of new technologies will help secure workers to cope with the declining number of workers.

Major space development organizations

Processing sales

Applied to communication towers where rust could not be removed



40m-tall parabolic antenna is constantly in motion, temporary scaffolding could not be set up, and the thick rust that is typical of coastal areas could not be removed.

CoolLaser does not use abrasives, so no dust is scattered, allowing work to be done without scaffolding, reducing processing time and costs. This type of need for partial repainting exists in many places.

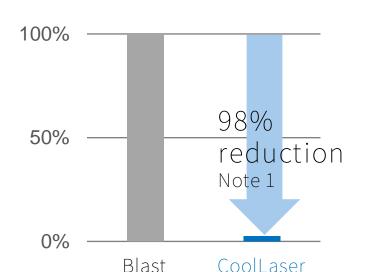


CoolLaser is more environmentally and worker-friendly than existing methods, and reduces waste costs and LCC.

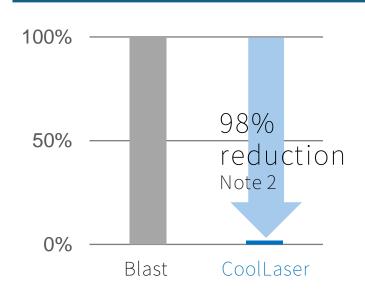
CoolLaser changes the 3Ds (Dirty, Dangerous and Demeaning) in the workplace to 3Cs (Cool, Clean and Creative), contributing to the well-being of workers.

Removing salt prevents the recurrence of rust and reduces life cycle costs, contributing to the maintenance and management of infrastructure within limited budgets.

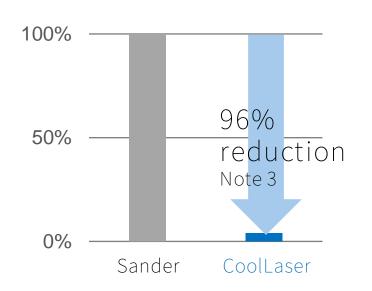
Industrial waste disposal costs and CO2 emissions



Removal of salt that can cause rust to reoccur



Reduction of lead, PCBs, etc., which are harmful to workers



Note 1: 40kg/m2 of abrasive material used to remove paint using the sand blasting method ÷ (1kg/m2 of paint + 40kg/m2 of abrasive material) = 98% reduction. Source: Tomomi Kibata and Yasutaka Sasaki (2016) "Effect of reducing industrial waste containing harmful substances such as lead and PCBs using the circulating eco-clean blasting method"

Note 2: 1-Laser hybrid (CoolLaser + cup wire) method 0.6mg/m2 ÷ Sand blasting method 35.4mg/m2 = 98% reduction. Source: Civil Engineering New Technology Showcase 2023 in Tokyo (Date: 2023/09/27 Organized by: Public Works Research Institute) "Substrate preparation technology using laser surface treatment technology"

Note 3: 1-CoolLaser 2.4mg/m³ ÷ Lead concentration when using power tools (diamond tools) 61mg/m³ = 96% reduction. Source: Environmental Management Center Co., Ltd. "Work environment measurement during paint removal work (2024/3/25)"

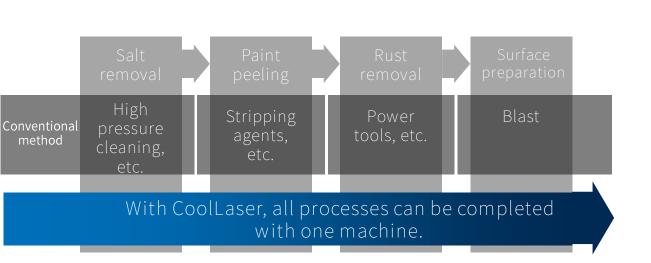


CoolLaser can handle all processes in one go and reduce costs.

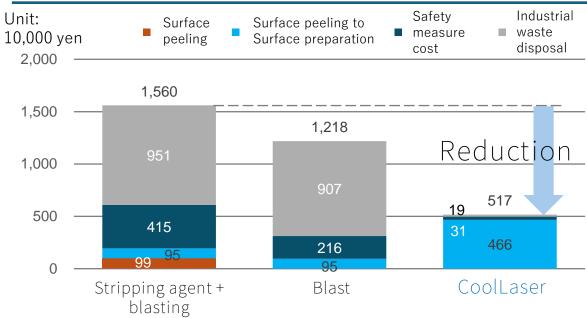
Conventionally, surface preparation required changing equipment for each process, but with CoolLaser, the entire process can be done in one go.

It also reduces costs such as industrial waste disposal fees, and taking into account other advantages, there are great benefits for all three parties: the client, the workers, and the users.

Substrate preparation process



Cost comparison by processing method Note 1



Note 1: Source: In -house calculations assuming girder end (treatment area: 73 m2), old paint film: 300 µm (containing PCBs). Assumes that crushed slag and garnet (non-metallic abrasive) will be used as the abrasive for blasting.



The infrastructure maintenance market that CoolLaser targets is vast and numerous.

With iron and oxygen, any structure will corrode through rust. There are a wide range of maintenance needs for outdoor structures, and our company focuses on the following



Domestic numbers

Note: Global blasting sales market size 8.7 Billion USD (a) × 145 yen/USD (2024/9/27 TTM Mitsubishi UFJ Research & Consulting) × 6.4% (b) = Domestic blasting sales market size 80 billion yen (a) Maximize Market Research Global shot blasting machine market (2023) (b) Kobunsha "Takayoshi Sato's Overseas Construction Market Size Edition (2015)" Japanese construction market size 257.6 billion USD ÷ Global construction market size 4 trillion USD The market size is a figure calculated by our company using the above calculation method based on public information or data created by a third party, etc. There are limitations to the accuracy of statistical surveys and data created by a third party, and it is an estimated value calculated based on certain assumptions or assumptions by our company, so it may differ significantly from the actual market size.

Markets where BLAST is used Sources: Roads = Ministry of Land, Infrastructure, Transport and Tourism "Road Statistics Survey (March 2022)", Railways = Ministry of Land, Infrastructure, Transport and Tourism "Railway Statistics Annual Report (FY2021)", Communications = JTOWER Business Plan (May 2024), Power Transmission = Ministry of Economy, Trade and Industry "Current Status of Technical Standards for Steel Towers and Utility Poles (November 2019)", Maritime = Japan Federation of Coastal Shipping Associations Maritime Statistics Handbook (2019), Docks = Ministry of Land, Infrastructure, Transport and Tourism Ports and Harbors Bureau (April 2023), Plants = Agency for Natural Resources and Energy "Electricity Survey and Statistics (2019)", Storage = Agency for Natural Resources and Energy "Petroleum Facilities Survey (March 2020)"

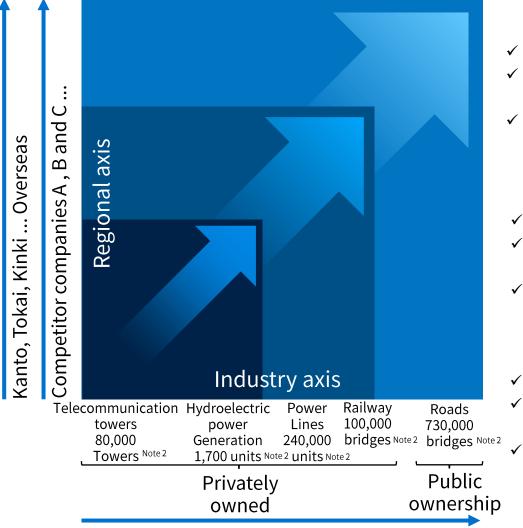
Confidential All rights reserved. © 2025 TOYOKOH Inc



CoolLaser future growth strategies

We have built up specifications and a track record for laser processing for each industry, and are expanding to other regions, other companies in the same industry, and overseas. Since infrastructure maintenance is a wide-ranging business with a huge number of cases both domestically and internationally, we are not limited to our own use, but as an equipment manufacturer, we will contribute to the maintenance of social infrastructure widely together with our users.

Sales expansion image



Examples of industry-based development measures

- ✓ Obtaining technical review certification for expressway companies
- Railway handbook specifications based on demonstration of long life in the railway field
- ✓ Establishment of transmission line tower processing method by major electric power core processing company

Examples of regional development measures

- ✓ Collaboration with sales partners (leasing companies, agencies)
- Nationwide equipment deployment by construction equipment rental companies
- ✓ Sales expansion through exhibitions

Post-IPO growth strategy

- ✓ Utilizing raised funds to expand sales structure and increase leads
- ✓ Use the funds raised to conduct overseas PoCs (e.g., US state transportation departments, national oil majors, etc.)
- ✓ IPO and increased trust in the company, leading to higher order rates

Note 1: The above table is merely an image of the CoolLaser development that we currently envision, and does not represent any specific plans or forecasts, nor does it guarantee their achievement.

Note 2: The figures shown are for the domestic market. See page 17 for the source. Hydroelectric power generation: Agency for Natural Resources and Energy "Electricity Survey Statistics (2019)"



The future of infrastructure maintenance (CoolLaser and combination with other new technologies)

Actively promote collaboration with next-generation infrastructure maintenance technologies and transform the 3Ds to 3Cs at construction sites^{Note 1}.







Robotics (automated machines)

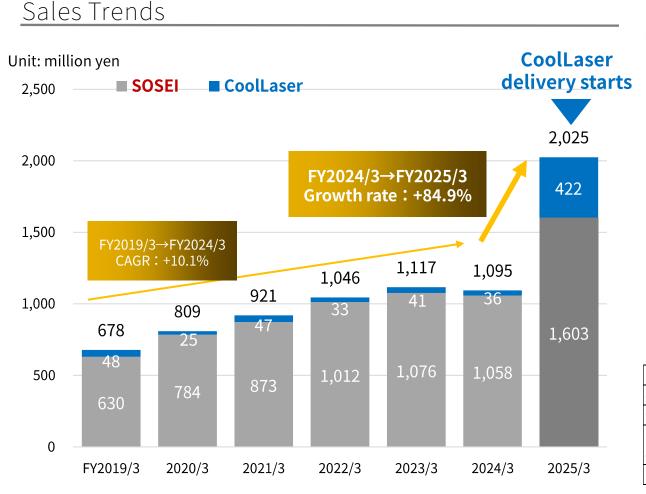
4: Overview of financial results for FY 2025/3 and budget for FY 2026/3

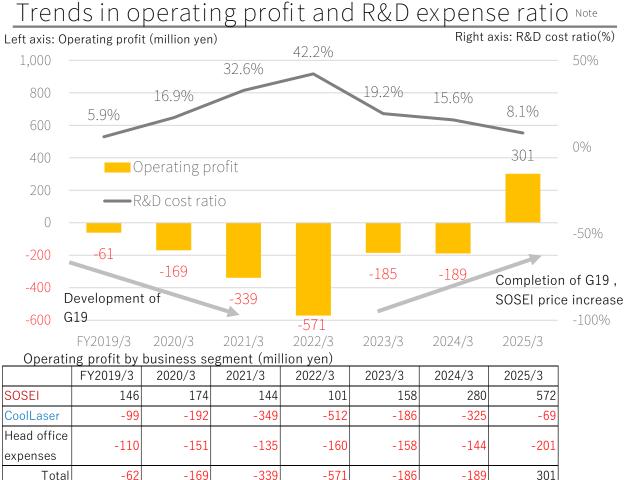




With the release of CoolLaser G19, sales increased and development costs decreased.

Sales growth with the start of CoolLaser delivery. With the launch of G19, R&D expenses have decreased and the company has turned a profit. SOSEI's continued growth is the foundation that supports the high growth of CoolLaser.





Note: R&D cost rate = R&D cost \div Sales

Orders received are increasing with the start of sales of CoolLaser equipment.



About the lead time

SOSEI

- Takes about 1 month from order to start of processing.
- Takes a maximum of about 6 months from the start to process completion.
- We use the percentage of completion method. The order amount is counted according to sales progress.

CoolLaser

• Takes about 6 months from order to delivery.

About FY2024/3

SOSEI has also received an order for a large project spanning 1,500 two and a half years, and orders for both businesses are on the rise.

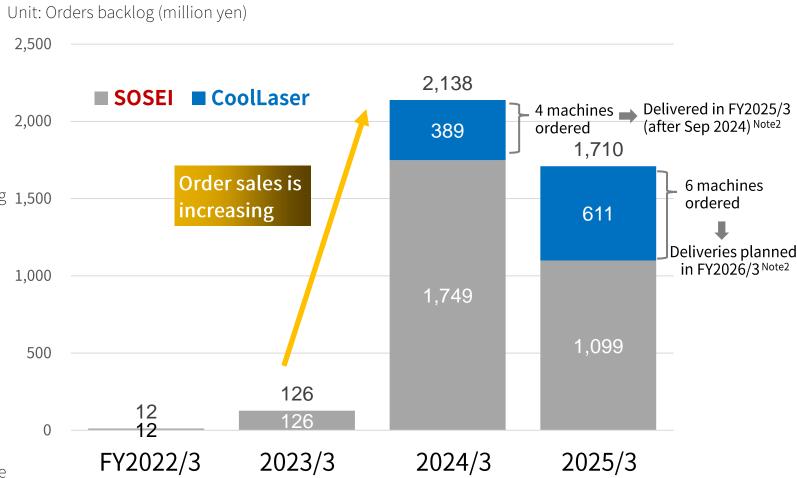
CoolLaser started receiving orders for G19, and order sales increased.

About FY2025/3

The orders of SOSEI is counted as large-scale projects progress. The number of processing partner companies has increased as a result of receiving large-scale orders, and the expanded capacity will lead to sales growth.

Orders for CoolLaser have been received for delivery in the first half of FY2026/3. Orders are continuing to pile up for the second half and beyond.

Orders backlog Notel by business and by year



Note:1: Order backlog= Cumulative amount of order sales received at the end of each fiscal year - amount recognized as sales by the end of the fiscal year Note 2: The estimated delivery time is the current estimated delivery time, and may differ from the actual delivery time.



CoolLaser Business "Mid-term Management Plan" Announced (Released December 9, 2024)

The mid-term management plan for the CoolLaser business was published on the company's website. The "number of CoolLaser deliveries" has been selected as a KPI and the minimum and maximum numbers for each fiscal year up to the FY2028/3 have been announced.

In the FY2026/3, the target was 9 to 15 units, but in the financial results summary for the FY2025/3 released on May 14, 2025, the performance forecast for the FY2026/3 was disclosed as 12 units.

CoolLaser Business "Mid-term Management Plan" (FY2026/3~FY2028/3)



Source: TOYOKOH website (NEWS) Dec 9, 2024 "Medium-term Management Plan for the FY2026/3 to FY2028/3" https://www.TOYOKOH.com/wp/wp/wp-content/uploads/2024/12/press_release_20241209.pdf



The land and building for the new CoolLaser factory in Hamamatsu City was acquired in November 2024.

Operations are scheduled to begin in the fall of 2025.

The current research laboratory produces about one unit per month, but the new manufacturing and development base, "HAMAMATSU BASE," will be able to produce up to 10 units per month, planned to start the operation in the fall of 2025^{note}.

To obtain the loan, as a deep tech venture certified by the Ministry of Economy, Trade and Industry for its "Business Activity Plan for Utilizing Innovative Technology Research Results," the company borrowed 300 million yen from Mizuho Bank, with 50% of the debt guaranteed by the Japan Small and Medium Enterprise Agency.

Note: The maximum production volume that can be expected at the site, after an increase in manufacturing personnel, etc.

New production and development base of CoolLaser 'HAMAMATSU BASE'



Source: TOYOKOH website (NEWS) Dec 16, 2024 "Utilizing the Small and Medium Enterprise Agency's "Innovative Technology Research Results Utilization Business Facilitation Debt Guarantee System" to borrow 300 million yen from Mizuho Bank" https://www.TOYOKOH.com/wp/wp/wp-content/uploads/2024/12/press_release_20241216.pdf

| 2 | 他人主報 | 3 (市) | 1 (n) |



Commons Asset Management, Inc. and Yokogawa Bridge Corp participate as cornerstone investors in TOYOKOH's IPO (released April 8, 2025)

Press release and the websites of Commons Asset Management, Inc. and Yokogawa Bridge Corp

Commons Asset Management, Inc. is actively engaged in impact investment (investment that aims to obtain both social returns and long-term economic returns by investing in companies that create a positive impact on society in order to create a better future), and aligns with our innovative efforts in the field of infrastructure maintenance.

Yokogawa Bridge Corp is Japan's largest manufacturer of bridges (steel bridges), and as social needs change from new construction to maintenance and management, they have high expectations for CoolLaser as a new method of infrastructure maintenance, which led them to invest in it.







"CoolLaser Method" selected as a semi-recommended technology for FY2025 by the Ministry of Land, Infrastructure, Transport and Tourism (released April 21, 2025)

Of the 3,716 construction methods registered in the "NETIS (New Technology Information System)" operated by the Ministry of Land, Infrastructure, Transport and Tourism (as of the end of March 2025), the CoolLaser construction method was selected as a "semi-recommended technology" for FY2025 with the aim of promoting its use as an excellent new technology in public works and other projects.

The adoption of the CoolLaser processing method will be an added point for processing companies, providing an incentive to adopt the CoolLaser processing method.

Release from the Ministry of Land, Infrastructure, Transport and Tourism regarding the selection of recommended and semi-recommended technologies for FY2025

NETIS

登録番号:CB-230005-A

新技術名称 :回転式レーザー素地調整工法(CoolLaser工法)

録 日 : 2023年5月19日



ホーム・

国土交通省について▶

報道·広報

ホーム > 製造・広報 > 製造発表資料 > 令和7年度推奨技術・準推奨技術として計23技術を選定 へ過去最多の選定数で工事施技術の一種の強化へへ

令和7年度推奨技術・準推奨技術として計23技術を選定 〜過去最多の選定数で工事等技術の一層の強化へ〜

公共工事等における優れた新技術の活用を促進するため、外部有識者の審査を経て、推奨技術が 15技術、準推奨技術が8技術の合計23技術を選定しました。推奨技術の選定数は過去最多となりま した。



回転式レーザー素地調整工法 (CoolLaser工法) (橋梁などの銅構造物における再塗装前の 素地類整工法)

本技術は、高出力の連続波レーザー を回転させて鋼構造物のサビ、塗膜 と腐食の要因となる塩分を除去でき る素地調整工法である。従来技術は 残留塩分に課題があった。本技術の 活用により、塗膜再劣化が抑制でき、 鋼構造物の長寿命化とライフサイク ルコスト軽減が期待できる。





レーザー照射

Source: TOYOKOH website April 21, 2025 "Cool Laser Method Selected as Semi-Recommended Technology for FY2025 by the Ministry of Land, Infrastructure, Transport and Tourism<u>"</u>
https://contents.xj-storage.jp/xcontents/AS05463/8b87505b/6c58/44eb/9056/aeefb0fb3bdd/140120250421518877.pdf
3



SOSEI is taking advantage of the current trend of decarbonization and energy saving, and is expanding overseas, aiming to become No. 1 in the domestic BtoB roof maintenance market.

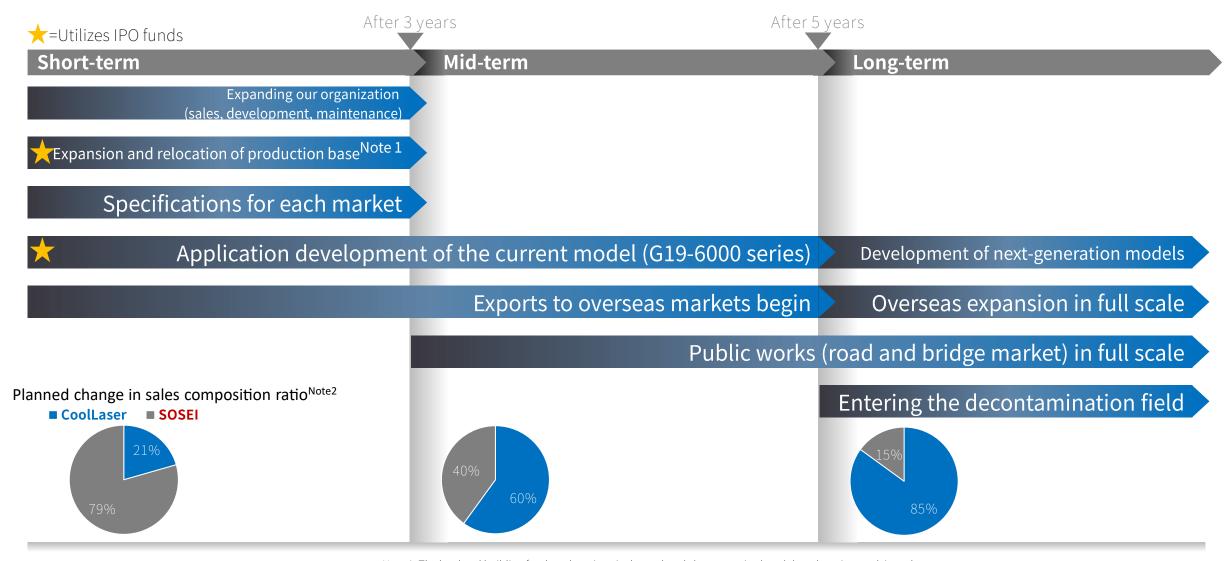
After 3 years After 5 years Mid-term **Short-term** Long-term Expansion of processing system (increase in recruiting and distributors) Note 1 Commercialization of SOSEI +solar power(SOSEI solar) with partners SOSEI solar in full scale SOSEI Line Robo for metal roofs in full scale No.1 in the domestic market for factory and warehouse roof maintenance Overseas expansion

Note 1: Agencies that operates sales and processing management

Note 2: The above table is a future plan only and does not guarantee its achievement. The plan may be revised or the implementation schedule may be changed in the future.



CoolLaser will grow its production and sales system, expanding its sales channels overseas, and contribute to solving a wide range of social issues by being adopted in public works projects.



Note 1: The land and building for the relocation site have already been acquired, and the relocation work is underway.

Note 2: The above table is merely a future plan and does not guarantee its achievement. The plan may be revised or the implementation schedule may change in the future.



We expect to continue to maintain profitability and grow sales in the FY2026/3

• In the FY2026/3, the second fiscal year after the start of sales of CoolLaser equipment, we expect to deliver 12 units.

The SOSEI business is expected to grow at a CAGR of about 10% from the FY2019/3 to the FY2024/3, and will further increase with the launch of the new SOSEI + Solar business.

- The gross profit margin for both SOSEI and CoolLaser is expected to remain at about 40% as in the FY2025/3. SOSEI is at a higher level than the average level of about 25% note in the construction industry.
- We expect personnel expenses to increase as the number of employees (including PA) will increase from 40 at the end of March 2025 to 50 at the end of March 2026 (breakdown: SOSEI + 4, CL + 4, head office + 2).

 *Personnel expenses in the table include executive compensation.
- We expect a reduction in IPO-related legal fees of 17 million in fees paid.

Budget by value

(Unit : Million yen、%)	FY2023.3	(Actual)	FY2024.3	(Actual)	FY202	5.3 (Actu	ıal)	FY2026	5.3 (Fored	cast)
		Composition ratio		Composition ratio		Composition ratio	Compared to last year		Composition ratio	Compared to last year
Sales	1,117	100.0	1,095	100.0	2,025	100.0	184.9	1 3,000	100.0	148.1
SOSEI	1,076	96.3	1,058	96.6	1,603	79.1	151.4	1,700	56.7	106.1
CoolLaser	41	3.7	36	3.4	422	20.9	1,151.4	1,300	43.3	308.1
Cost of sales	751	67.2	789	72.1	1,163	57.4	147.3	1,800	60.0	154.8
SOSEI	729	67.8	645	61.0	898	56.0	139.1	970	57.1	108.0
CoolLaser	21	52.7	143	392.0	264	62.6	184.0	830	63.8	314.4
Gross profit	366	32.8	305	27.9	862	42.6	282.1	1,200	2 40.0	139.2
SOSEI	346	32.2	413	39.0	704	44.0	170.6	730	42.9	103.7
CoolLaser	19	47.3	-107	△ 292.0	158	37.4	△ 147.4	470	36.2	297.5
Selling, general and administrative expenses	551	49.4	494	45.2	561	27.7	113.5	620	20.7	110.5
Salary	190	17.0	153	14.0	190	9.4	123.8	223	7.4	3 117.4
Research and development expenses	214	19.2	170	15.6	163	8.1	95.8	190	6.3	116.6
Expert fee	58	5.2	103	9.4	110	5.5	106.9	94	3.1	4 85.5
Other expenses	88	7.9	66	6.1	96	4.8	144.8	112	3.7	116.7
Operating profit (loss)	-185	△ 16.6	-189	△ 17.3	301	14.9	-	580	19.3	192.7
SOSEI	180	16.8	280	26.5	571	35.7	204.1	600	20.0	105.1
CoolLaser	-192	△ 466.1	-325	△ 885.4	-69	△ 16.4	21.3	200	6.7	△ 289.9
Head office expenses	-174	△ 15.6	-143	△ 13.1	-201	△ 9.9	139.7	-220	△ 7.3	109.5
Non-operating income	103	9.3	59	5.4	3	0.2	6.1	0	0.0	0.0
Non-operating expenses	31	2.8	28	2.6	42	2.1	149.5	20	0.7	47.6
Ordinary profit (loss)	-113	△ 10.2	-157	△ 14.4	262	13.0	-	560	18.7	213.7
Profit (loss) before income taxes	-113	△ 10.2	-157	△ 14.4	262	13.0	-	560	18.7	213.7
Profit (loss)	-114	△ 10.3	-158	△ 14.5	321	15.8	-	480	16.0	149.5

Note: Source: Construction Industry Information Management Centre, General Incorporated Foundation, "Construction Industry Management Analysis (2023) Summary Edition," p. 14



5 : APPENDIX





TOYOKOH's business aligns with many of the SDGs' targets.

Contributing to a sustainable society through "infrastructure maintenance"

TOYOKOH is transforming work sites from 3Ds (dirty, dangerous and dangerous) to 3Cs (cool, clean, and creative), contributing to securing workers for infrastructure maintenance work, which is declining due to the declining birthrate and aging population, and realizing a sustainable society.



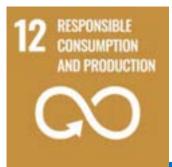
There are a huge number of factories and warehouses in Japan. By reinforcing old slate roofs with the SOSEI method and then installing solar panels, it is possible to generate clean energy using the vast roof area.



By transforming a 3Ds repainting construction site into a 3Cs one, it will be restored from a site that workers avoid to one where they find their work rewarding, and by making infrastructure sustainable, it will lead to economic growth.



Our company works in the field of infrastructure maintenance, and by repairing aging social infrastructure and connecting it to the future, we contribute to creating a sustainable society where future generations can continue to live safely and securely.



The first layer of SOSEI 's three- layer structure is an insulating material that suppresses the rise in temperature in the attic of factories in summer, and is effective in reducing air conditioning costs and CO2 emissions . In addition, while blasting, which is the main existing rust removal method, emits a large amount of CO2 when abrasives are disposed of, CoolLaser does not produce industrial waste, so it also has the effect of reducing CO2 emissions .



Existing rust removal methods are all 3Ds and have a high environmental impact, producing industrial waste and wastewater. CoolLaser changes repainting work to 3Cs, reducing the burden on workers and helping to

secure workers to carry out aging

infrastructure maintenance work.

-CoolLaser -SOSEI



SOSEI is a unique method of roof repair that utilizes painting technology, and CoolLaser is a unique method that utilizes laser technology in the construction field. Rather than competing for a piece of the existing market, they are working to create completely new markets and jobs by innovating on their own .



Our company has set a collaborative strategy as its management policy, and is working to select partner companies for each field and build a system for joint research and development and sales expansion. This collaborative strategy is not limited to Japan, but we also plan to actively conclude partnership agreements with overseas companies in order to expand overseas.



Annual reduction of 287,200t of GHG (greenhouse gas) Note1





If blasting is replaced with CoolLaser in the annual market size of 6 million m2 for bridge repainting work, GHG emissions can be reduced by 287,200 t (7.98 kg/m2).

This is equivalent to

- 1. In terms of car mileage, this is the distance traveled by approximately 40,000 cars in one year.
- 2. The amount of electricity used by approximately 20,000 households per year

Note 1: Avoided emissions of 287,200 tons / year = A: GHG emission reduction per 1 m2 of rust removal (functional unit) of 7.98 [kg/m2] (B: Electricity used by the blasting method: 45 kW x 50 % x 5 hours / day = 112.5 [kWh/day] - C: Electricity used by CoolLaser: 50 kW x 50 % x 5 hours / day = 125 [kWh/day]) \div Area of rust removed per day: 10 [m2/day] x CO2 emission coefficient: 0.533 [kgCO2/kWh] + (B: Amount of waste generated: 41 kg/m2) x CO2 emission coefficient: 0.2161 [kgCO2/kg] x D: Amount of use: 6 million m2 Note 2 (annual amount of rust removed) x E: Useful life: 6 years.

Note 2 : Source: Yamada Infrastructure Technos Co., Ltd. "Reducing waste and changing the world!!" p.20 https://cpds.kentsu.co.jp/assets/img/technology/45/document_pdf/ecoclean.pdf

70% of member companies are painting construction companies across the country.

They are also expected to be potential users.

In order to create a laser processing market, the association has been working on standardization of safety rules and handling qualification systems. 70% of the member companies are painting companies nationwide, and they have voiced their expectations as the first users of CoolLaser.

Academic Member

Repair Specialist Safety Expert Optical Expert Private practitioner

indings

Society of Laser Processing for Transportable System

Human Resources Development Committee

Safety Committee

From the perspective of the client/prime contractor, a certain level of knowledge that is sufficient to be entrusted with processing is made visible.

資格

Qualification system for laser irradiation processing / management technicians

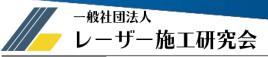
Qualified Person

- · Increase in people seeking qualifications
- · It will lead to attracting maintenance workers





Source: https://www.laser-seko.org/





Name Society of Laser Processing for Transportable System

chairman

Kazuhiro Nishikawa (Former President of the Public Works Research Institute, National Research and Development Agency)

Base

39 Aoshimacho, Fuji City, Shizuoka Prefecture

Establishment

April 1, 2019

Number of members

Activities

director

106 companies *As of the end of April 2025, including supporting members and academic members.

- 1) Formulation and publication of safety guidelines for laser processing
- 2) Human Resource Development
- 3) Research into issues and countermeasures related to laser processing
- 4) Raising awareness about laser processing

Vice Chairman

- -Teruyuki Iwasaka (ICI General Center, Maeda Corporation)
- -Kazuaki Toyosawa (CEO, TOYOKOH Inc.)

Expert Director

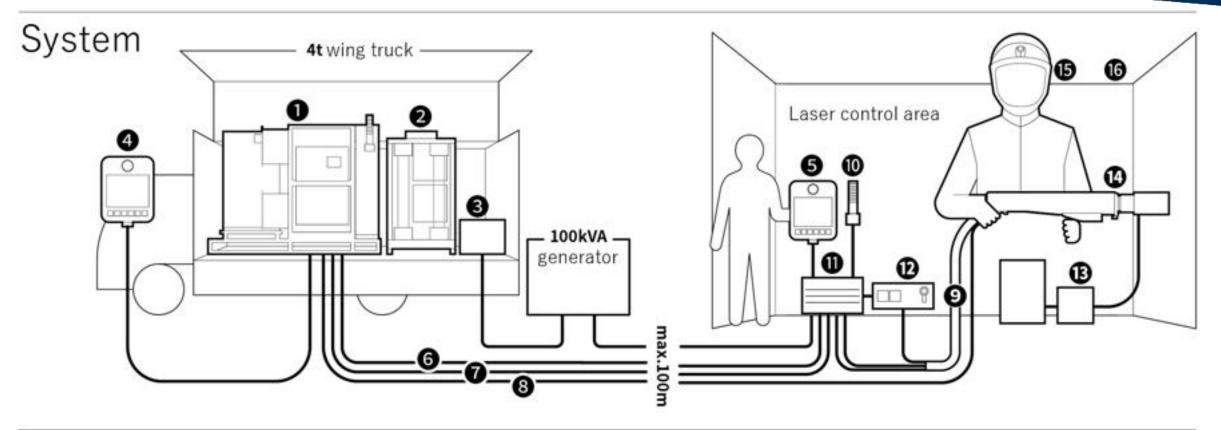
- -Takeshi Mori (Professor Emeritus, Hosei University)
- -Shoken Shimizu (Specially Appointed Researcher, New Technology Safety Research Group, National Institute of Occupational Safety and Health, Japan Occupational Health and Safety Organization)
- -Kaori Nagai (Professor, Department of Architecture, College of Industrial Technology, Nihon University)
- -Shigenobu Kainuma (Professor, Department of Civil Engineering, Graduate School of Engineering, Kyushu University)
- -Kazuhisa Fujita (Professor, Photonics Industry Creation Graduate School)
- -Kazuhiro Nishikawa (Former President of the Public Works Research Institute, National Research and Development Agency)
- -Ryohei Hanayama (Associate Professor, Optical Information and Systems Division, Graduate School of Optical Engineering)
- -Keigo Suzuki (Associate Professor, Fukui University, Engineering Department, Architecture and Construction Engineering Course)

Director

- -Masamitsu Takahashi (Chairman of Daiichi Cutter Kogyo Co., Ltd.)
- -Naoyuki Yamamoto (President and CEO of Yamamoto Optical Co., Ltd.)
- -Masaaki Matsuura (Suzuyo Construction Co., Ltd. Managing Director and Civil Engineering Division Chief)

CoolLaser Configuration





Truck mounted

- ①System
- ②Laser oscillator chiller
- ③ Transformer

Touch Panel

- 4 Touch panel A
- ⑤Touch panel B

Cables

- 6 Air hose
- 7 Communication cable
- ®Optical fiber
- 9Connection cable

Laser Control Area

- 10 Signal Tower
- ① Control box
- 12) Head chiller
- 13 Dust collector

Laser head

(14) Laser head

Safety measures

- ¹⁵Protective equipment
- **16** Shielding material

System Overview

Item Specifications

Laser: 5.4kW near infrared light continuous wave (CW)

Loading dimensions: Approx. 5,500mm (W) x 1,750mm (D) x 2,100mm (H)

Total weight: Approx . 3,000kg

Power consumption: 50kVA (please use a generator of over 100kVA)



SOSEI with other processing methods
SOSEI has a good overall balance and is a service with a high repeat rate among customers.

	SOSEI	Metal cover method A method of covering a steel roof from above	Slate roof replacement A method to replace a roof with a new one
When to use	The structural strength is weak and metal cover is not an option, insulation is required, and the price is reasonable	When the appearance has priority	When deterioration is significant and it is possible to stop factory operations
Cost (design unit price) Note 1	○ (15,000 yen / ㎡)	△ (20,000 yen / ㎡)	(15,000 yen / ㎡)
Cost (running)	(Every 15 to 20 years)	⊚ (Every 20 years)	© (Every 20 years)
Load	○ (~2.5kg/ m²)	X (6~15kg/ m³)	-
Durability	(About 15 years)	⊚ (About 20 years)	© (About 20 years)
Processing Period	○ (~150 m2 / day)	○ (~150 m2 / day)	× (50 m2 / day)
Thermal insulation	© (Around -20 °C)	△ (Insulation required, increased costs)	× (No effect)
Pre-processing	© (No pre-processing required)	△ (Requires drilling holes or replacing hook bolts, asbestos inspection)	× (Factory operations must be suspended)
Comprehensive evaluation	© Overall, there are no weaknesses. Well-balanced	△ The roof load is large, and processing costs are high due to the recent rise in raw materials.	× The factory must be suspended

Note 1: Scaffolding costs are excluded.



This document has been prepared by our company solely for the purpose of providing information to deepen understanding of our company, and has not been prepared for the purpose of soliciting investment or engaging in any similar activities, whether in Japan or overseas.

The statements about the future, such as earnings forecasts, contained in this document (including, but not limited to, our business plans, market size, competitive situation, information on the industry, and growth potential) are based on our judgment and available information as of the date of publication of this document, and do not guarantee future earnings, etc., and contain various risks and uncertainties. Please note that actual earnings, etc. may differ from forecasts due to changes in the environment, etc.

This document contains information about parties other than our company, such as information about our competitive environment, industry trends, and changes in the general social structure. Our company has not independently verified the accuracy, rationality, or appropriateness of this information, and does not guarantee any of the information.

<Contact> TOYOKOH Inc. pr@toyokoh.com