

The Fiscal Year ending March 2021 (2020 April- 2020 June)

Business Results

August 2020



1. Business Results for the 1st QT FY ending 2021 March

2. 2021 March ending Projection

3. Appendix

Business Highlight for FY2021 1QT

- The revenue was 6,589million yen (Comparison with previous year +631 million yen、 +11%)
- Although labor cost and depression for photosensitive material capacity expansion increased, advanced products sales growth well more than compensating cost increase, operation profit increased +128% YOY, ordinary profit increased +47% YOY, net profit increased +48% YOY thanks to good electronics materials market.

(Million yen)	Prev. Year1Q Result	FY20211Q Result	I/D AMT	YOY I/D %
Revenue	5,958	6,589	+631	+11%
Operation profit	594	760	+166	+28%
Ordinary Profit	531	781	+249	+47%
Net Profit	366	542	+175	+48%
Net profit per share	46.21	68.38		
FX Rate (USD)	¥108/\$	¥108/\$		

The summary of the Business Result FY2021 1QT

■ Revenue

- ✓ 6,589million yen (YOY+631million yen,+11%)
- ✓ Photosensitive Materials Segment: Sales growth mainly thanks to advanced product such as PAG and polymer
- Chemicals Segment: Solvent sales for Electronic application and aroma chemical increased. Logistic business kept high tank operation, but less movement of goods.

■ Operation profit

- ✓ 760million yen (YOY+166million yen, +28%)
- ✓ Although fix cost (YOY +64million yen) for the capacity improvement in photosensitive materials segment increased, the profit increases as contribution from high-end application

■ Ordinary profit

- ✓ 781million yen (YOY+249million yen, +47%)
- ✓ Non-operating profit: FX impact, insurance income, less interest cost

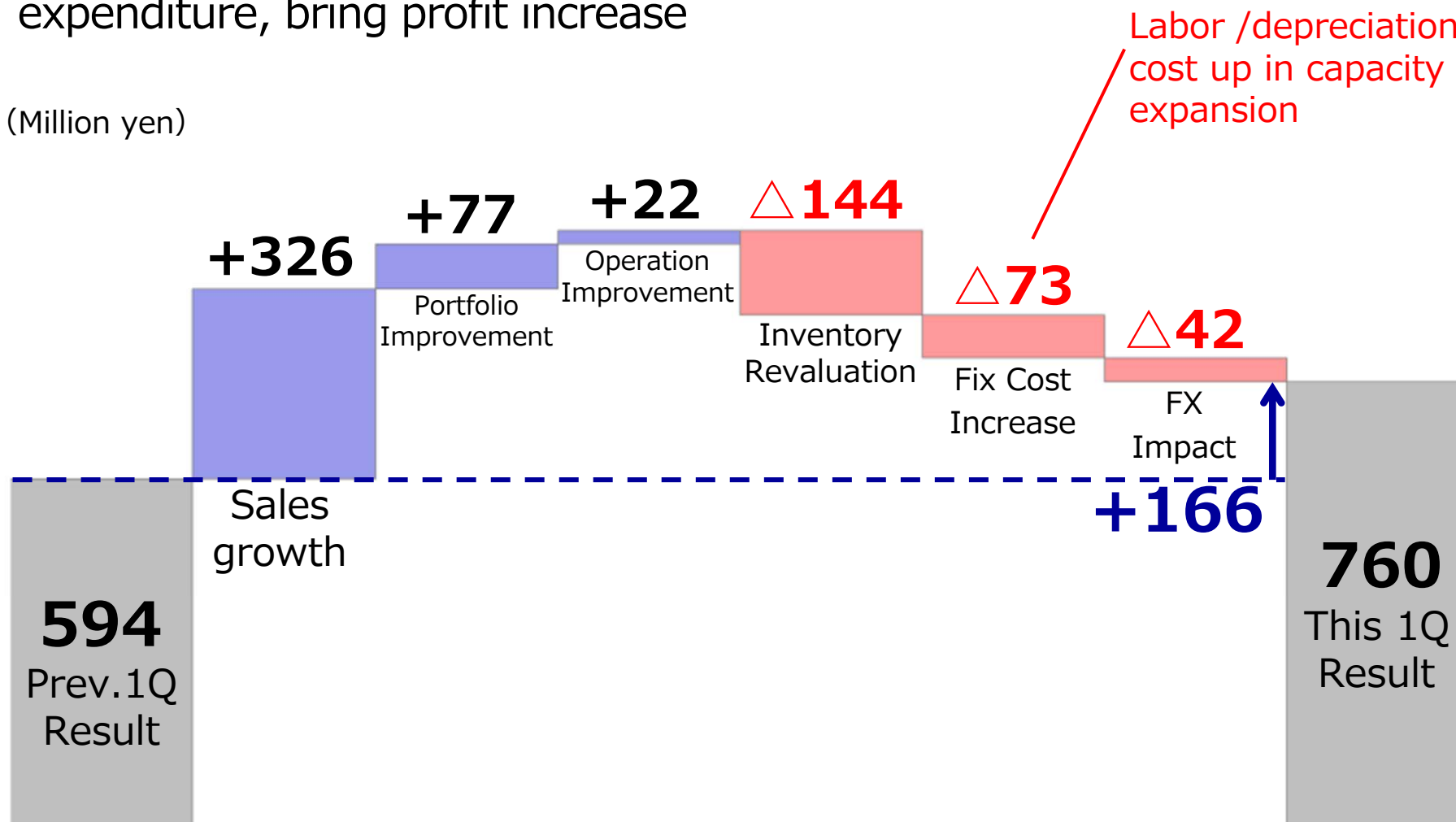
■ Net profit

- ✓ 542million yen (YOY+175million yen, +48%)

Operating profit: factors for increase/decrease

- Sales growth more than compensating capacity up investment cost and expenditure, bring profit increase

(Million yen)

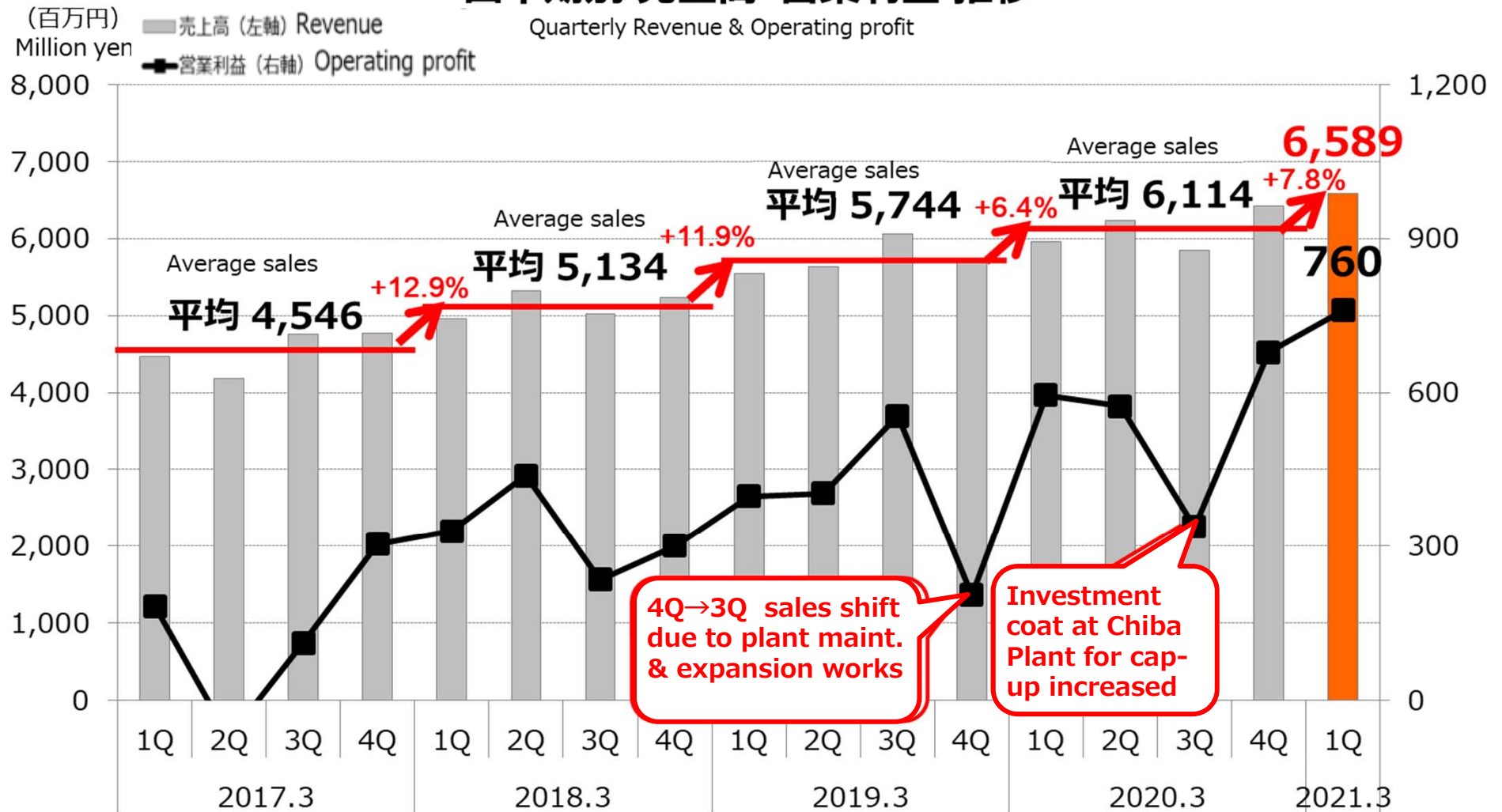


Quarterly Sales & Operating profit trend

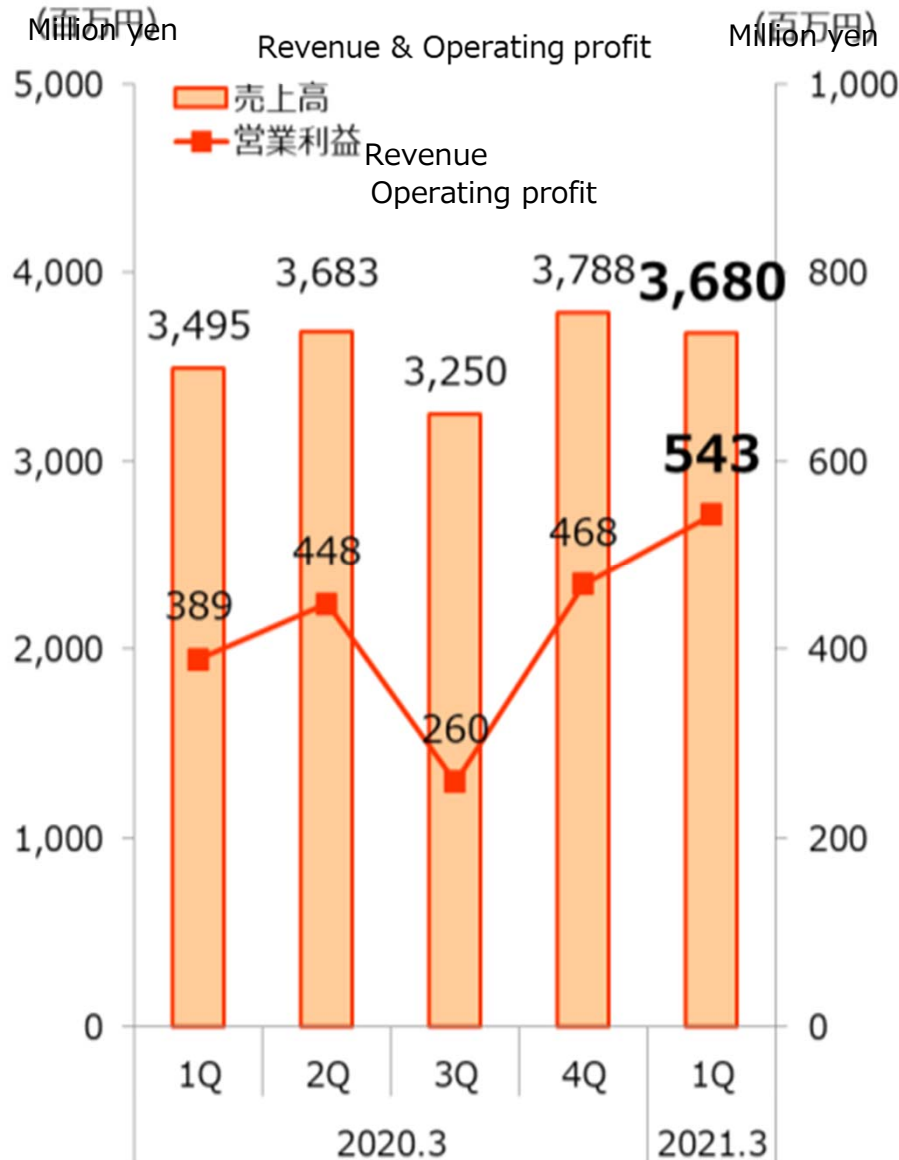
- Quarterly sales & operating profit steadily increasing, achieve historical sales & operating profit record

四半期別 売上高・営業利益 推移

Quarterly Revenue & Operating profit



Photosensitive Materials Segment



Revenue : 3,680 Million yen

(YOY+185 mio yen、+5%)

- high-end semiconductor application keep good sales
- Sales for FPD increase a little

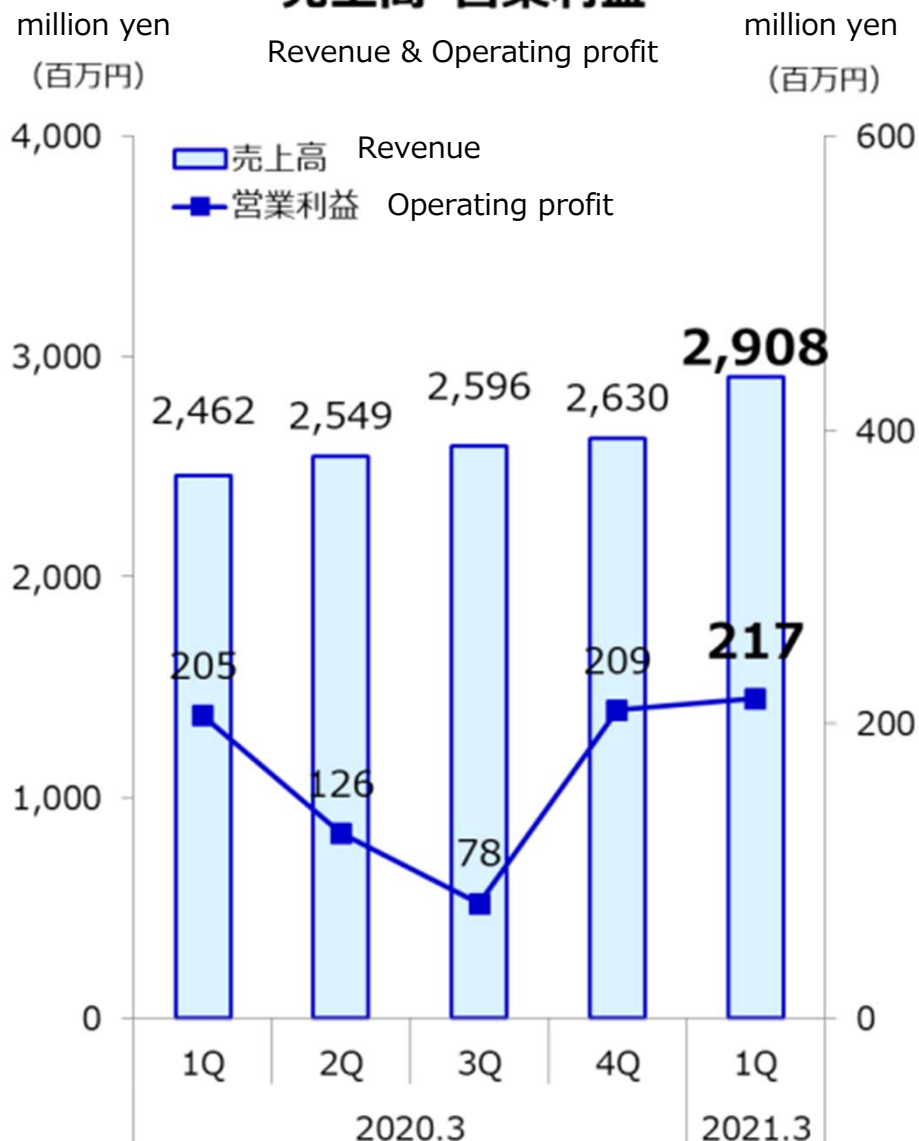
Operating profit : 543 Million yen

(YOY+154 mio yen、+40%)

- Although investment cost (labor, depreciation etc.) for the capacity improvement increased, the profit increases as contribution of sales expansion especially high valued products

Chemicals Segment

売上高・営業利益



Revenue : 2,908 million yen

(YOY+445mio yen、+18%)

- EL solvent for high-end application and aroma chemicals keep good sales.
- Logistic business (Chemical Tank Terminal) has less movement of good, but keep high tank operation.

Operating profit : 217 million yen

(YOY+12million yen、+6%)

- High valued product kept good sales

Profit & Loss Statement

- Revenue 6,589 million yen (+631million yen, +11%)
- Gross profit 1,518 million yen (+175million yen, +13%) thanks to high valued product sales increase as more than compensating fix cost up for capacity expansion
- Op. profit 760 million yen (+166百万円, +28%) thanks to a little selling expense increase (+1%)。

(Million yen)	2020.Mar 1Q	2021.Mar 1Q	I/D AMT	I/D %
Revenue	5,958	6,589	+631	+11%
COGS	4,615	5,070	+455	+10%
Gross Profit	1,342	1,518	+175	+13%
Selling Exp.	748	757	+9	+1%
Op. Profit	594	760	+166	+28%
Non-Op profit	20	59	+39	+192%
Non-Op Exp.	83	39	△44	△53%
Ordinary profit	531	781	+249	+47%
Extraordinary P&L	△2	△11	△8	△301%
Profit before Tax	528	769	+241	+46%
Tax	161	226	+65	+40%
Net Profit	366	542	+175	+48%

[Gross profit +175]
High values product sales expansion contributed profitability (22.5%→23.0%)

[Non Op profit +39,
Non Op exp △44]
Insurance income +35,
FX loss △42

Balance Sheet

- Tangible asset increased +949 million yen due to capacity up investment for photosensitive materials
- In accordance with investment, interest-bearing debt increased +1,616

(million yen)	2020 Mar end	2020 June end	I/D AMT
Current asset	15,503	16,718	1,215
Cash	3,582	4,031	449
Account receivable	4,654	4,886	231
Inventories	7,019	7,111	92
Others	246	688	442
Fixed assets	23,627	24,564	937
tangible assets	22,112	23,062	949
Intangible assets	407	499	91
Invest/others	1,107	1,002	△104
Assets total	39,130	41,282	2,152
Liabilities	28,561	30,245	1,684
Account payable	3,000	3,482	482
Interest-bearing debt	18,188	19,804	1,616
Other	7,372	6,957	△414
Net assets	10,569	11,037	467
Shareholders' equity	10,563	11,026	463
Revaluation & others	5	10	4
Liabilities & Net assets total	39,130	41,282	2,152

[Tangible asset +949]
Increased due to investment for photosensitive materials

[Equity ratio]
26.7% (Compared to previous QT△0.3pt)

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FY2021 Mar ending Projection

- Raised earnings forecast as consideration of high valued product sales increase and updated business impact by COVID-19
- Original planned FX rate is ¥105/\$, dividend keep as 20 yen per share

2Q Cumulative (Million yen)	2020.Sept end Original	2020.Sept end Revised	I/D AMT	I/D %
Revenue	12,500	12,500	0	0%
Op Profit	1,000	1,150	+150	+15%
Ordinary Profit	950	1,120	+170	+18%
Net profit	620	780	+160	+26%

Full Year (Million yen)	2021.March end Original	2021.March end Revised	I/D AMT	I/D %
Revenue	25,000	25,000	0	0%
Op Profit	1,800	1,950	+150	+ 8%
Ordinary Profit	1,700	1,870	+170	+10%
Net profit	1,100	1,260	+160	+15%

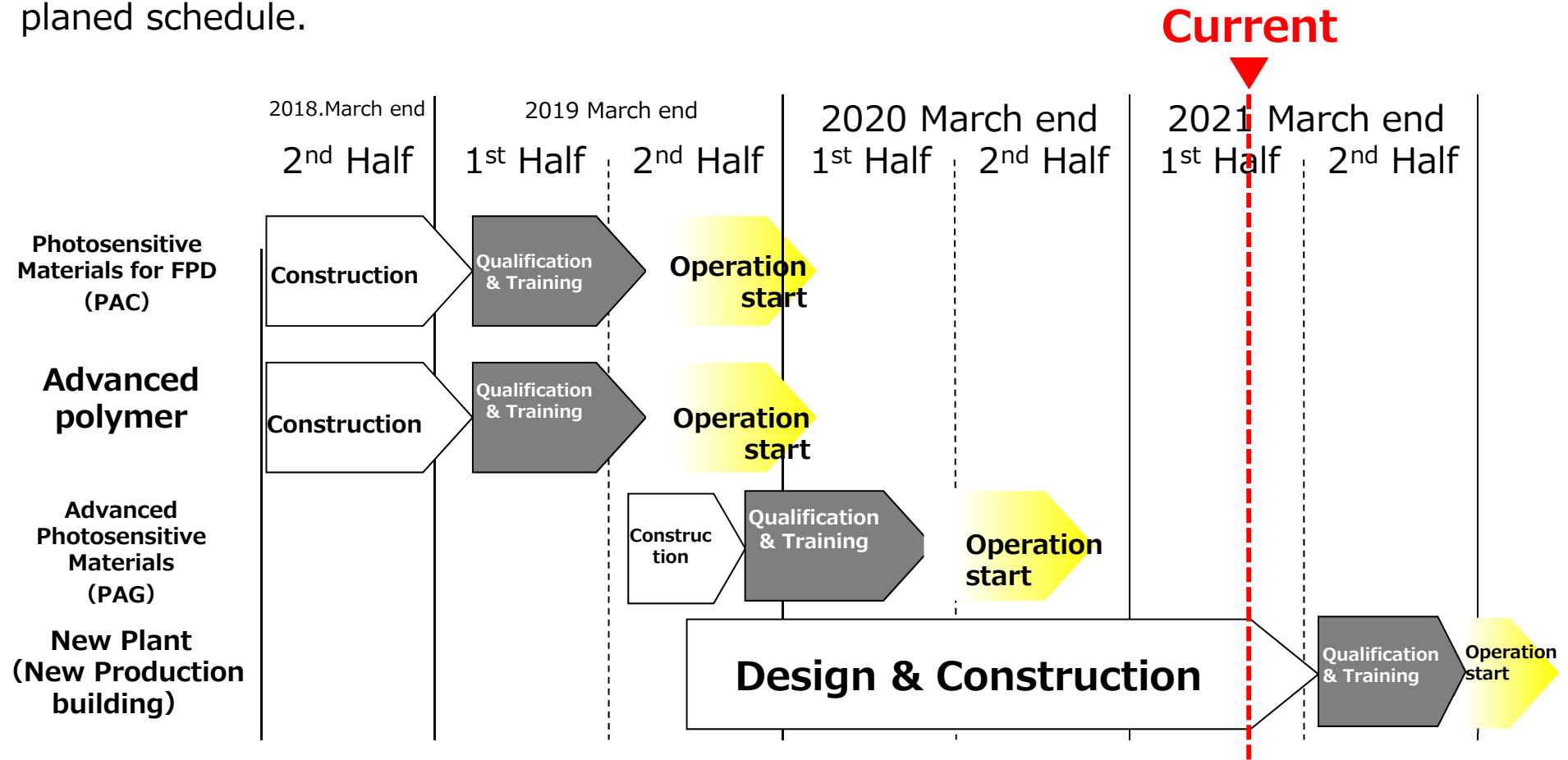
FY ending 2021 March Business Progress

- Keep good progress for original planned 2Q cumulative projection

(Million yen)	Sept end for FY 2021 March Original projection	June end For FY2021 March Result	Progress %
Revenue	12,500	6,589	53%
Op Profit	1,150	760	66%
Ordinary Profit	1,120	781	70%
Net profit	780	542	70%

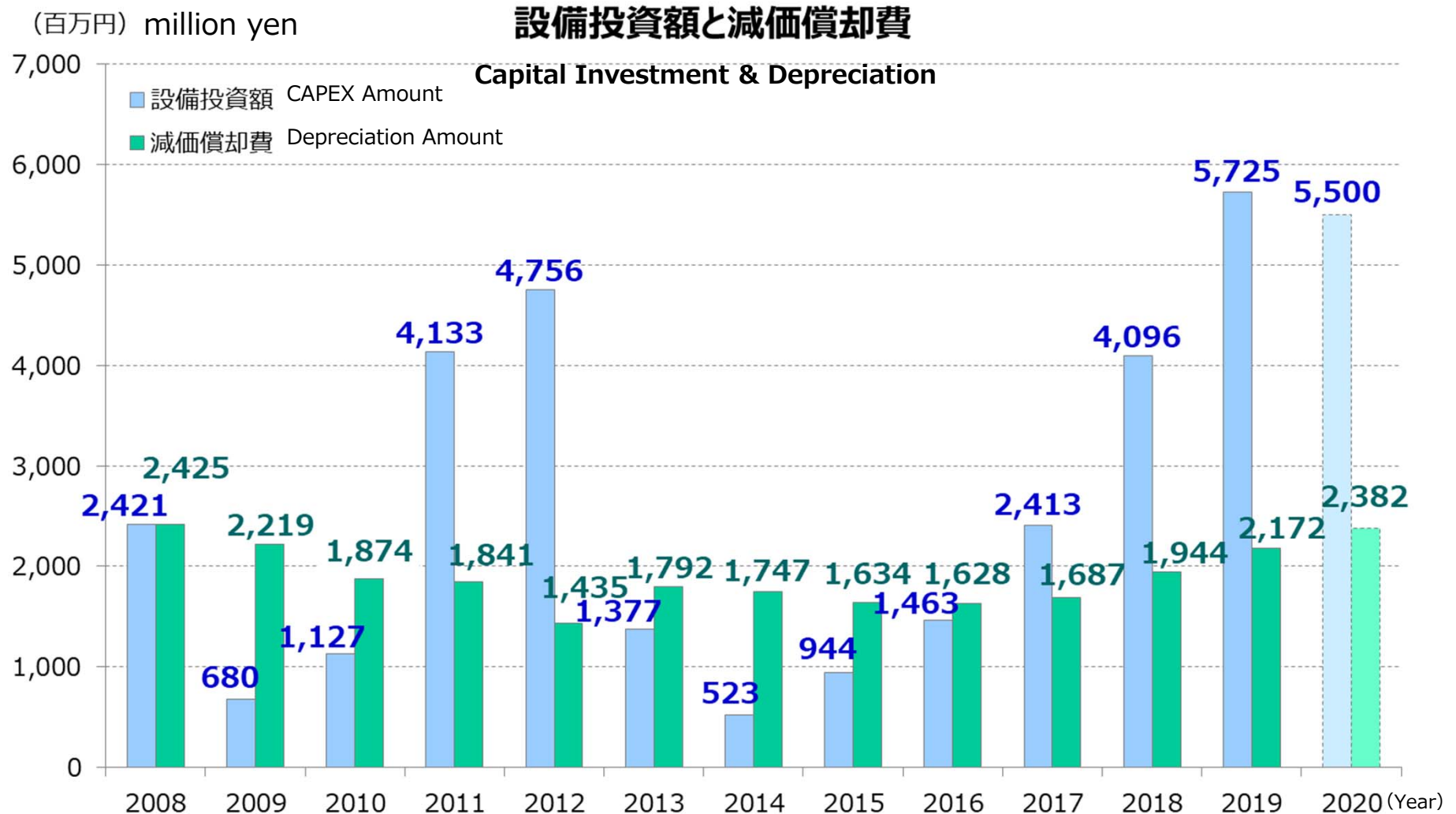
(Ref.) Photosensitive Materials Capacity Up Investment

- On going capacity up project to meet market demand increasing
- Completed capacity up project in the existing plant for FPD and polymer as 1st step and advanced photosensitive material as 2nd step
- New production plant construction to be completed in 2020 Sept as on going in the planned schedule.



(Ref.) Capital Investment & Depreciation History

- In year 2020, capital investment plan is about 5.5 billion yen as same level of previous year
- Depreciation will return to the level for year 2008.



1. Business Results for the 1st QT FY ending 2021 March

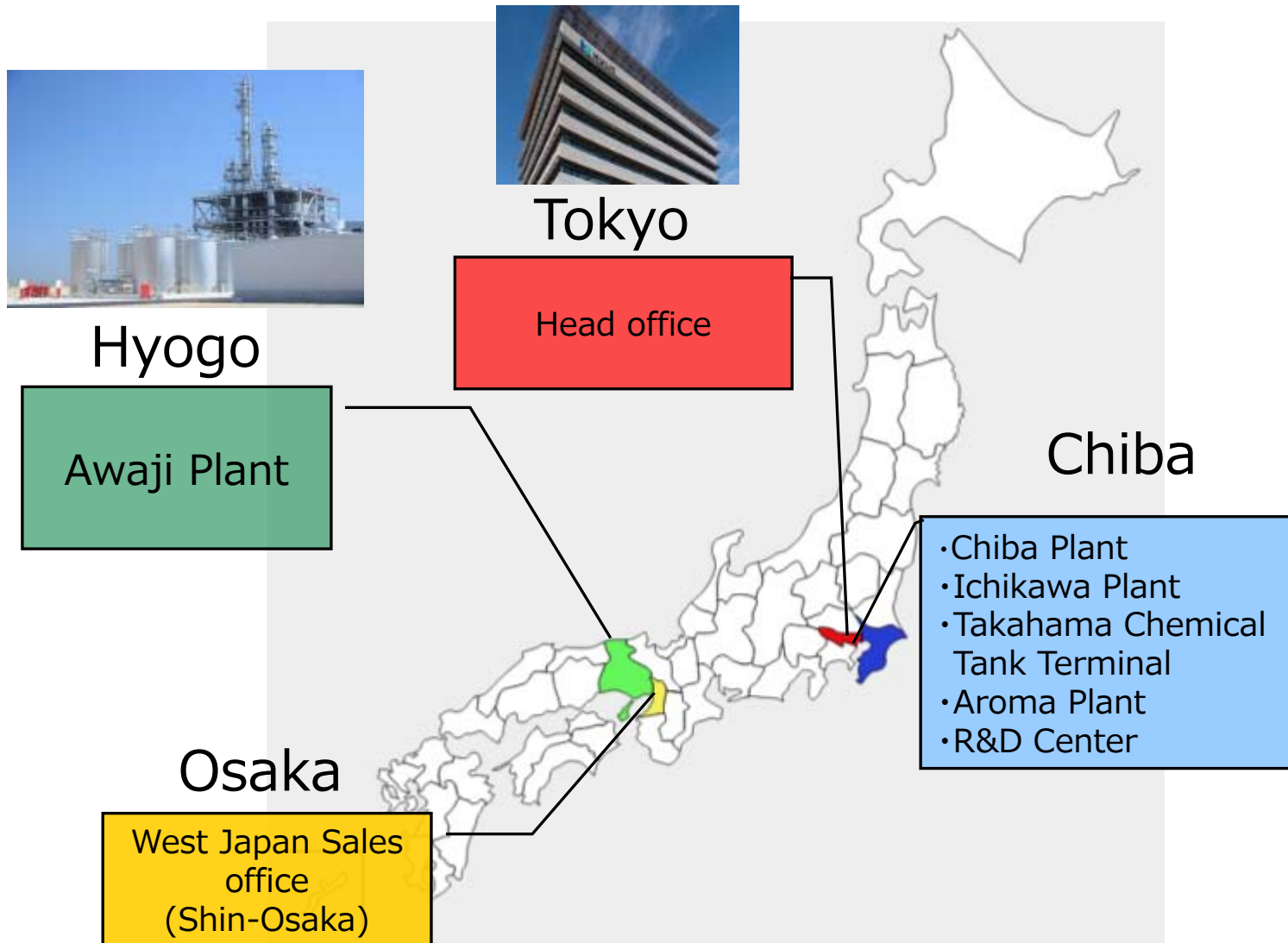
2. 2021 March ending Projection

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Corporate Outline

- Establishment : September 27, 1954
- Top Management : Yujin Kimura, President
- Paid-In Capital : 1,618 Million yen (As of March 31, 2020)
- Net Sales : 24,455 Million yen (For the year ended March 31, 2020)
- Employees : 688 (As of March 31, 2020)
- Listed Market : Tokyo Stock Exchange JASDAQ Market
- Securities Code : 4970

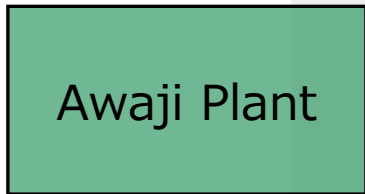
Site Map



Tokyo



Hyogo



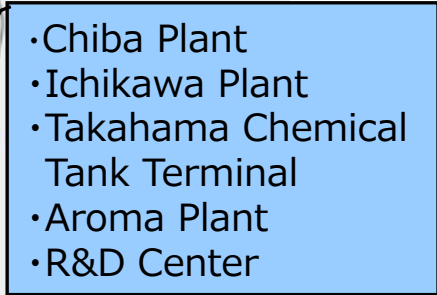
Awaji Plant

Osaka



West Japan Sales office
(Shin-Osaka)

Chiba



- Chiba Plant
- Ichikawa Plant
- Takahama Chemical Tank Terminal
- Aroma Plant
- R&D Center



Origin of company name

Differences between those possessed and those not possessed = Science and technology and strategy in Reconstruction of Japan after world war II.

“Our founder wanted to start a business that contributes globally from Asia based on chemical technology”, then he named it “Toyo Gosei Kogyo”.



A scene of Ichikawa City's Baraki in 1966 (Showa 41). Rice harvesting.

Under the environment, our founder did self-study about distillation technology, designed and made distillation tower and boiler.

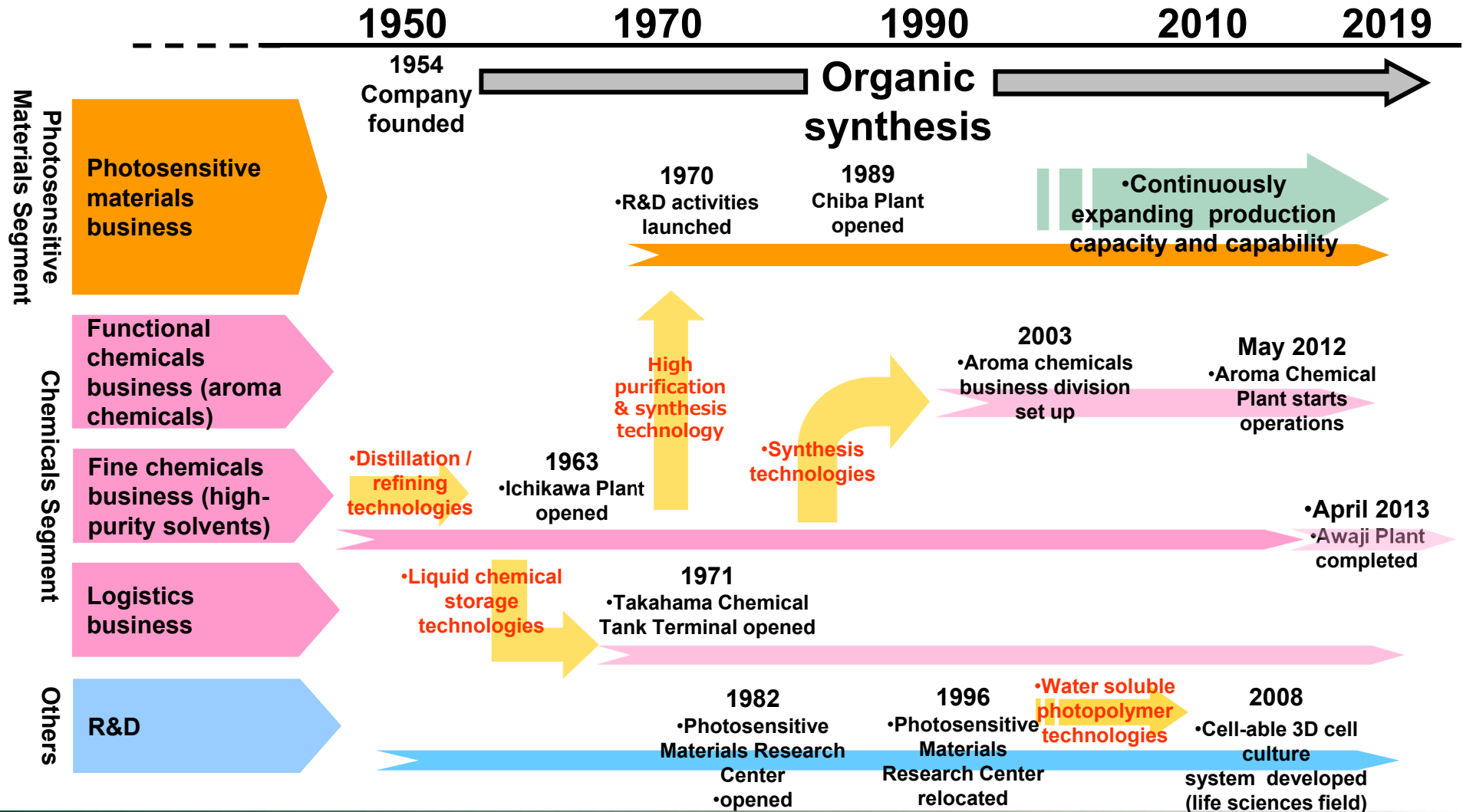
Source : City Ichikawa Nature Museum

Management Policy

1. Make what is needed in the times
2. Making something that other companies cannot make (Global niche top)
3. Research & Development and technology at the core in the business
4. Don't give up, do it simply honestly and sincerely

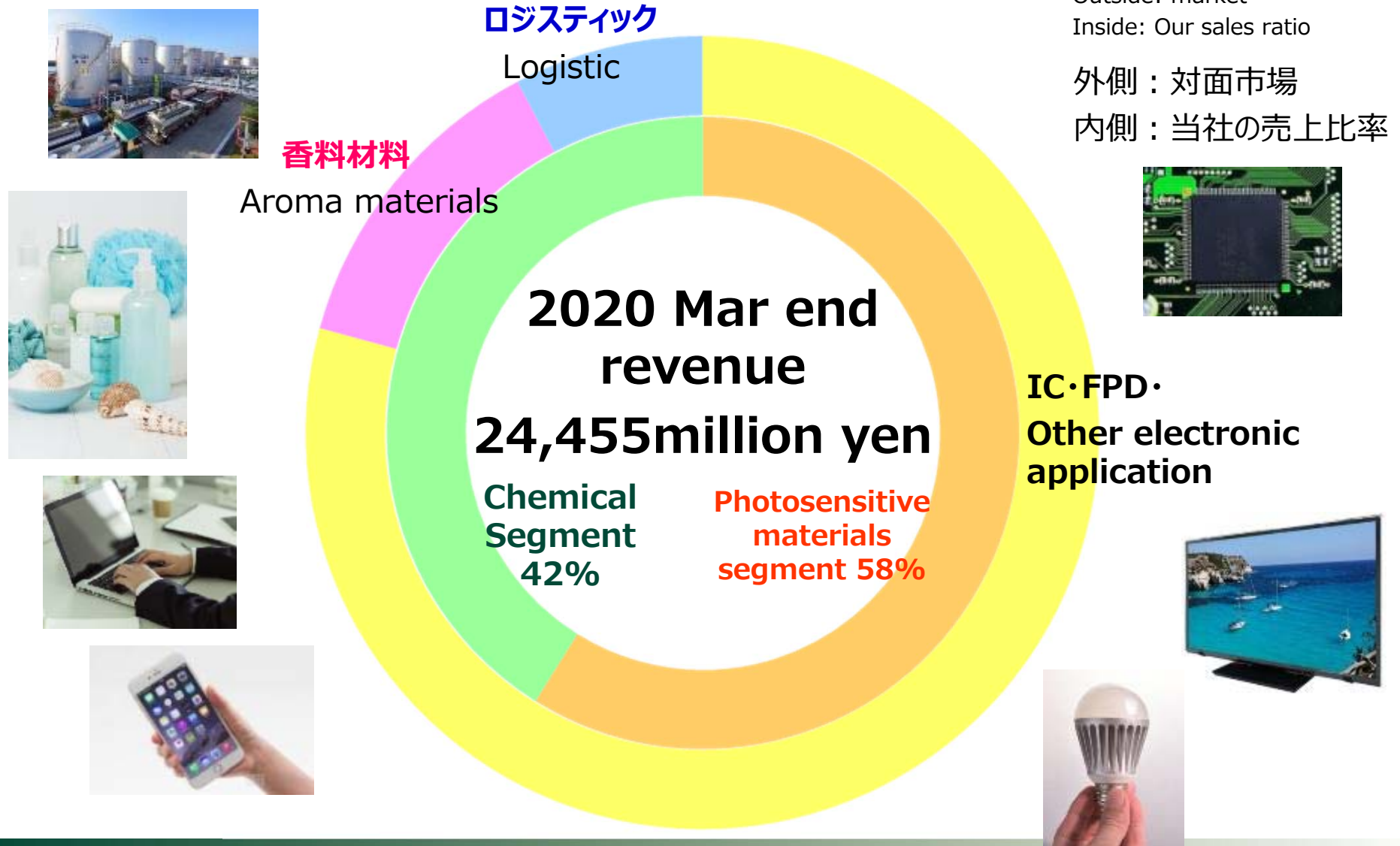
•Our Business History

- Since established in 1954, the Company expanding business in the functional chemicals field by leveraging our strengths in organic synthesis and purification technologies.
- Always estimate market's need to expand business



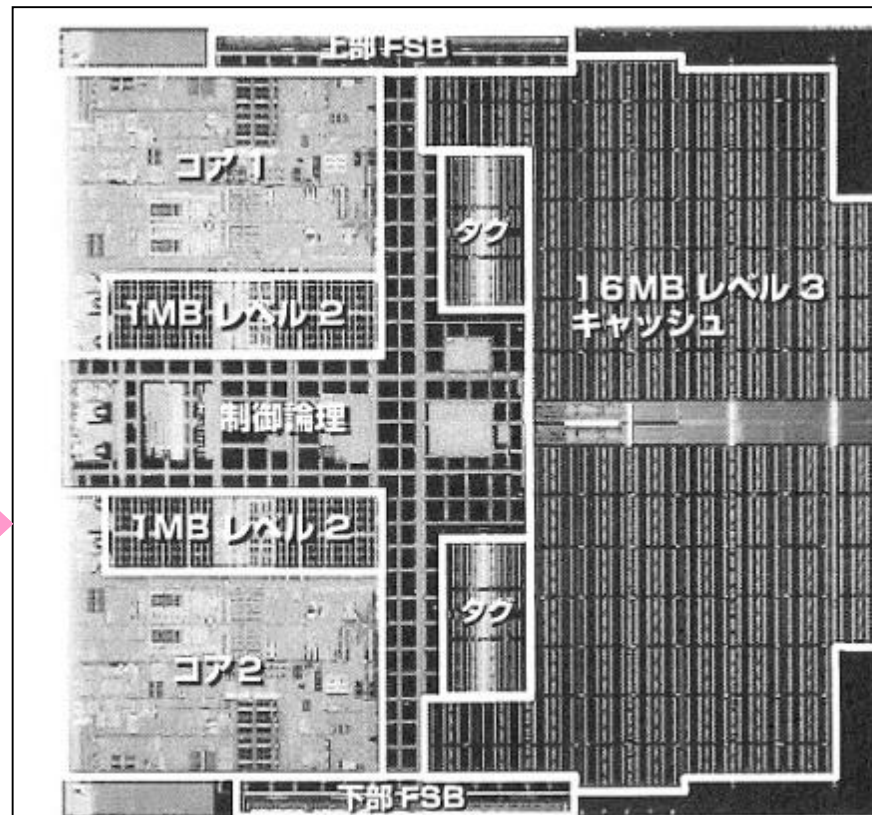
Business portfolio

- 80% sales from IC/FPD/Electronic application



Inside of IC Chip

- Intel's IC Chip: Photo of CPU(Central Processing Unit)



1nm=0.000001mm

Line width : 700nm~20nm
Production Technology :
65nm node, 8 layers Cu wire
of Transistors : 1.3 billion
Chip area : 435mm²
Level 2 cache : 1MB
Level 3 cache : 16MB
Operating frequency : 3.4GHz
Power-supply voltage : 1.25V
power consumption : 150W (peak)
110W (average)

図 1.15 インテル社製 Xeon (Tulsa) プロセッサの機能ブロック図
(2006年8月発表, FSB: 800MHz)

<http://www.eos.ncsu.edu/e115/text.php?ch=6&p=processors>

Intel's Xeon (Tulsa), Processor's function structure
(Present on Aug 2006, FSB: 800MHz)

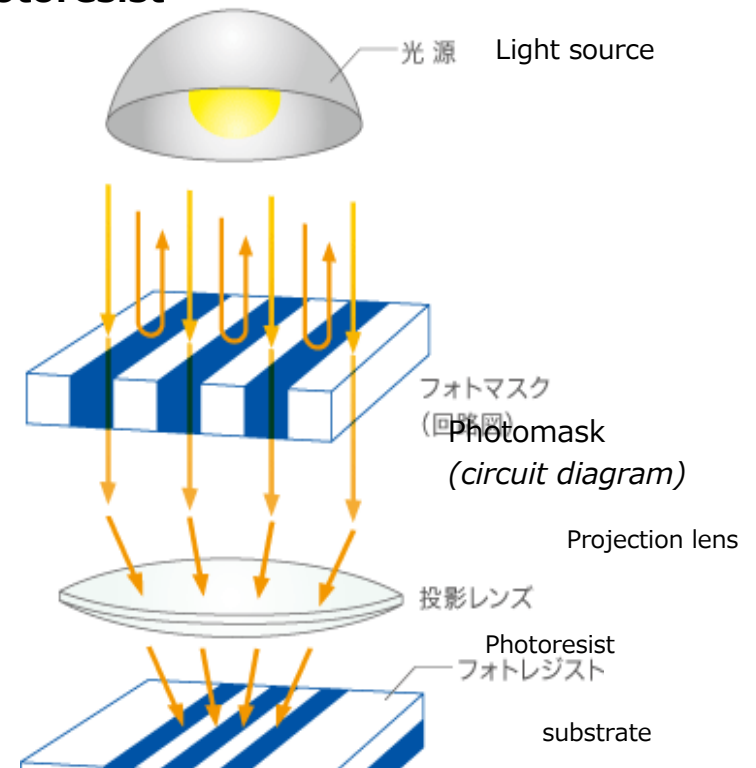
Photolithography in Semiconductor and FPD

- High definition FPD = Minimum line width
- Performance of CPU/Memory (IC) = Minimum line width

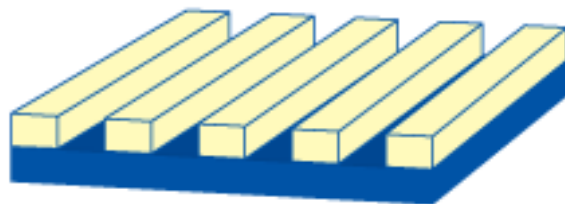
1. Coating photoresist on the substrate



2. Exposure via photomask as transferring image to coated photoresist



4. Developing by developer to get the pattern



3. Chemical reaction on the exposure area

Composition of photoresist

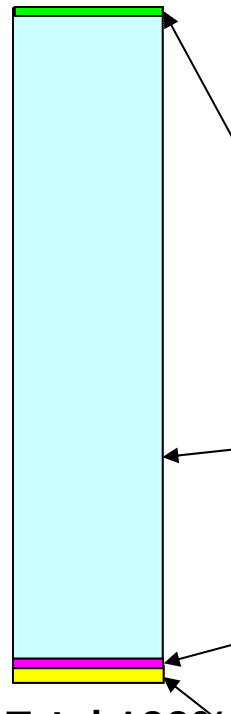
- Toyo Gosei's photosensitive materials are a critical component in photoresists used to make semiconductors and FPDs.



Photoresist (liquid form)

*Blended with other materials by photoresist makers

Common photoresist composition ratio



Additives

High-purity organic solvent (PGMEA, EL etc.)

Photosensitive materials
PAG: Photo Acid Generator
PAC: Photo Acid Compound
Several% to several tens% for polymer

Polymer (Resist resin, Base polymer) ~10%

•Our main products

Business Overview Photosensitive Materials/Chemicals (Solvents)

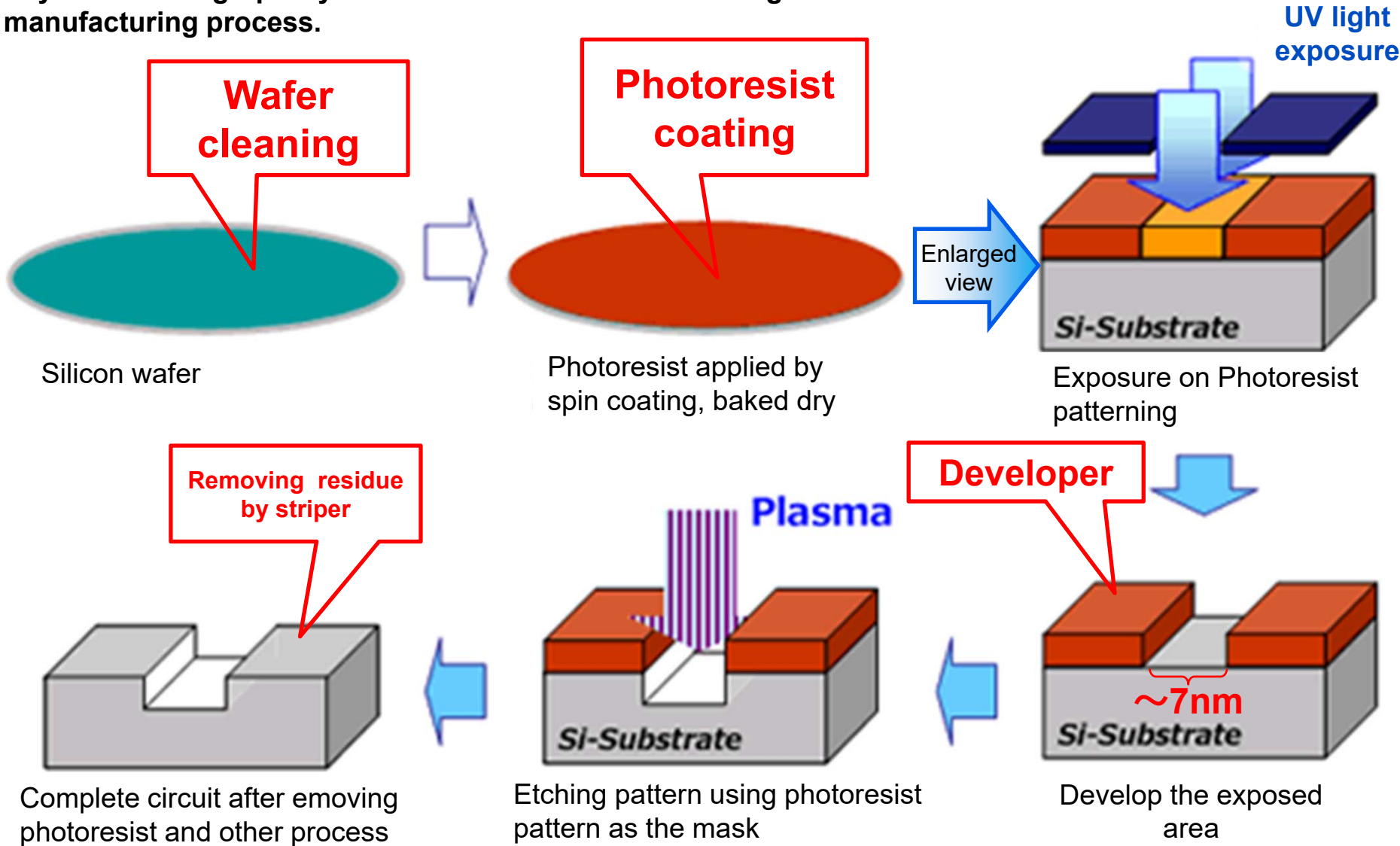
Toyo Gosei supplies photosensitive materials to customers worldwide. These materials play a key role in determining the performance of semiconductors and FPD.

Semiconductors' application is diversifying in growing market such as IoT, which is driving growth in photosensitive material demand.



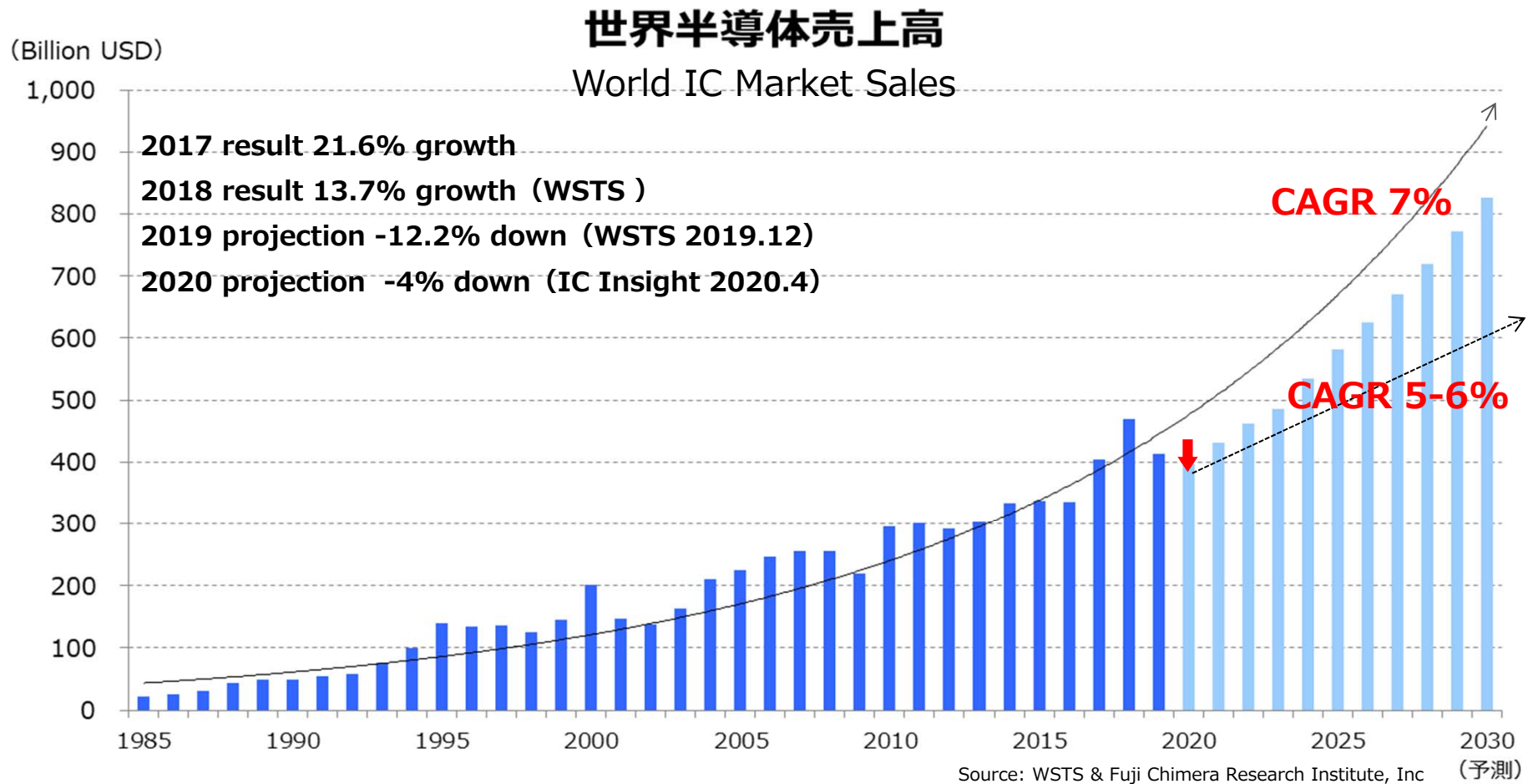
Business Overview high-purity solvents

Toyo Gosei's high-purity solvents are used in various stages of the semiconductor manufacturing process.



Semiconductor Market Development & Projection

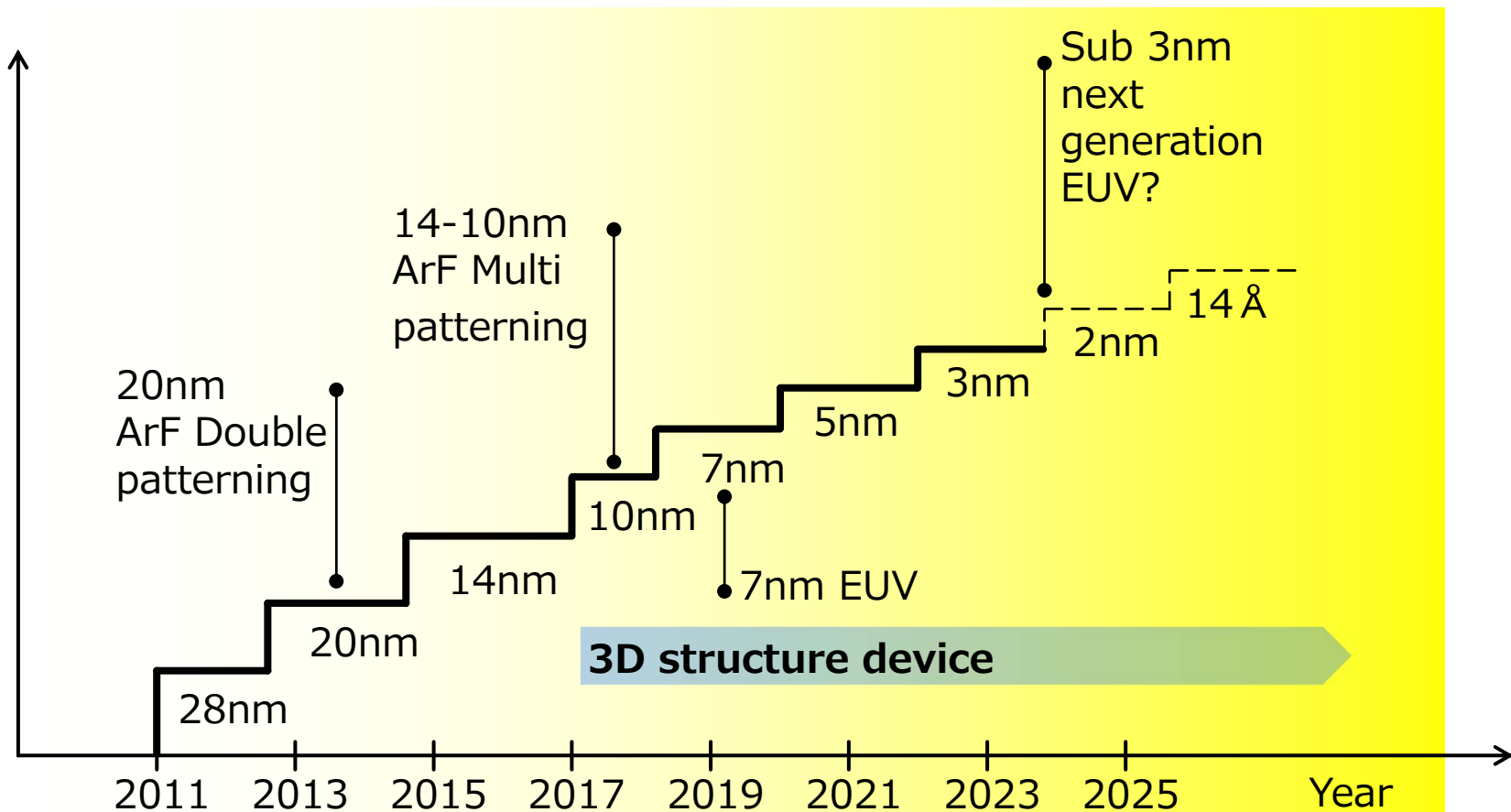
- Since 1980era, information society is driving IC market demand growth.
- In 2020, growth rate will be 0 or minus
- Thanks to progress of information communication technology support IC demand growth, x1.5-2.0 for 2020-2030



Projection

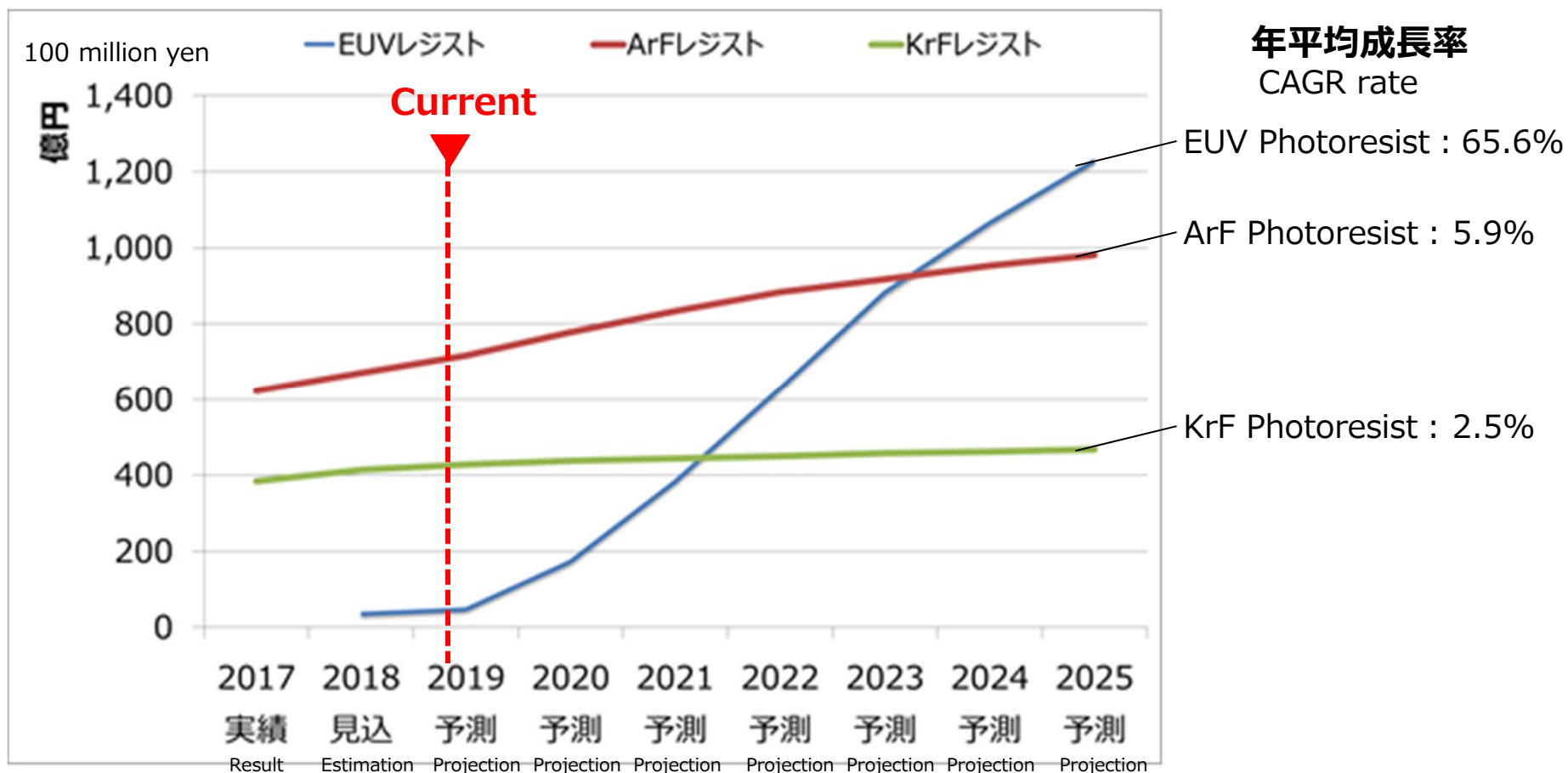
Down Size by photo lithography

- Semiconductor Node (Line Width) continues to be down size, 5nm technology in mass production now.
- For 2025, 2nm node process is under development
- In accordance with line width down size, surging need more high purity photosensitive materials



Photoresist Market Development

- EUV photoresist process started mass production in 2019
- EUV photoresist demand growth is estimated x 2.0 in 2021, x1.5 in 2022, x1.2 in 2023 compared to previous year will overtake KrF photoresist market size in 2021 and ArF photoresist market size in 2023.

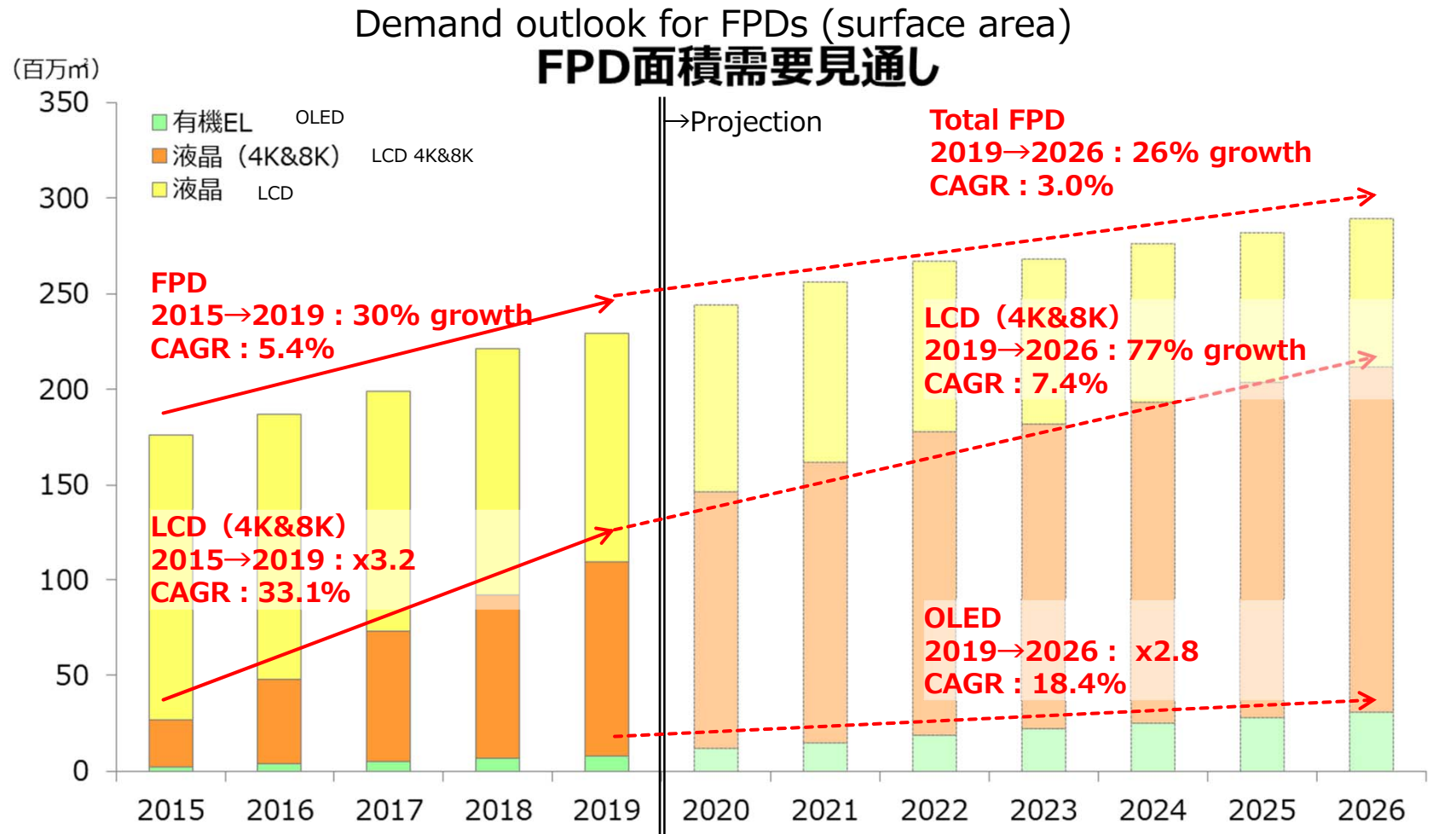


Source: Fuji Chimera Research Institute, Inc

「 & (オンゲストローム) 半導体プロセス材料/技術の展望調査 (2018年7月) 」より当社作成

FPD Market Trend

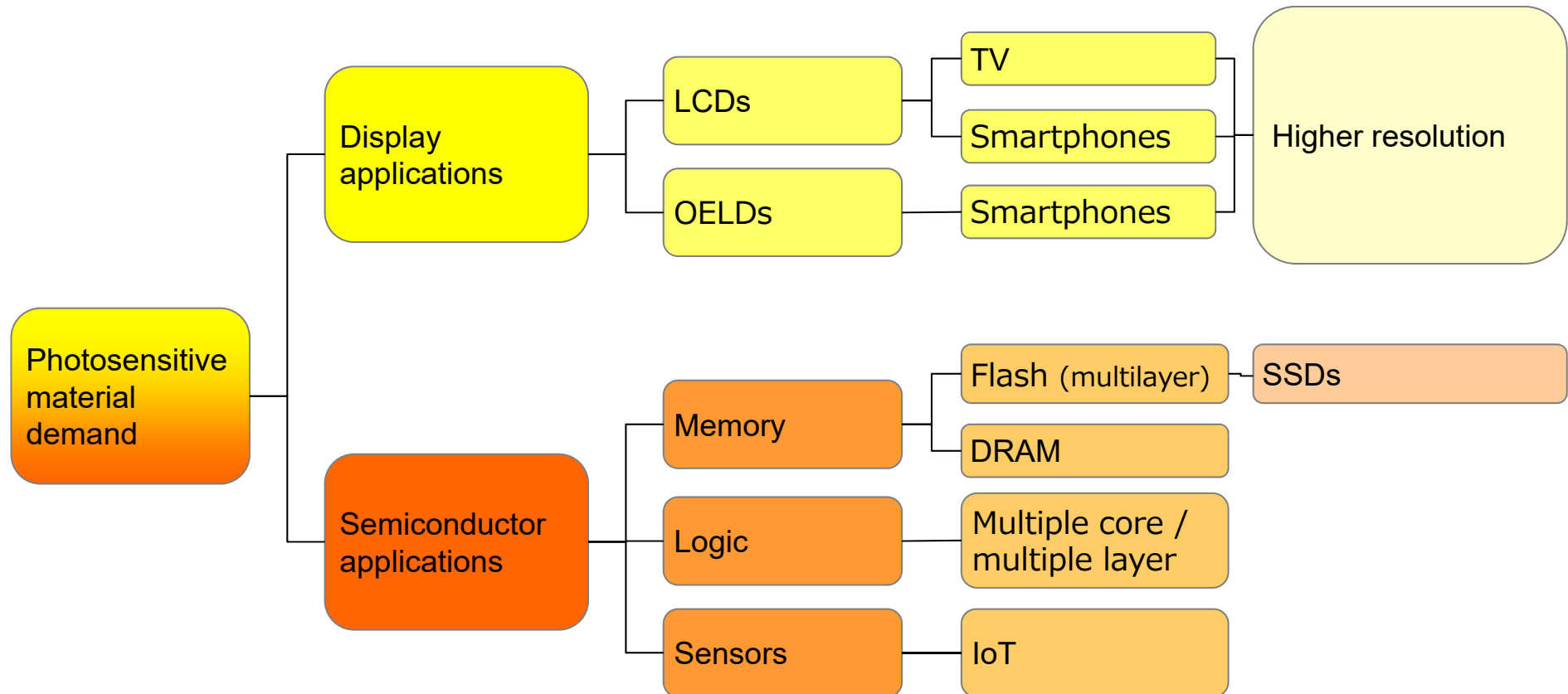
- FPD market continue to grow as CAGR 3%
- High end FPD combined LCD (4K&8K) & OLED shows higher CAGE, 8.6%, then it will be count as 70% of total in 2026.



Source : IHS Marketing

Key demand driver for Photosensitive Materials/ EL Solvent

Demand for photosensitive materials will be driven by market growth, and by the need for new types of materials as semiconductor and display technologies become more advanced.



Outlooks: Photosensitive materials Application, Wave length and Line Width

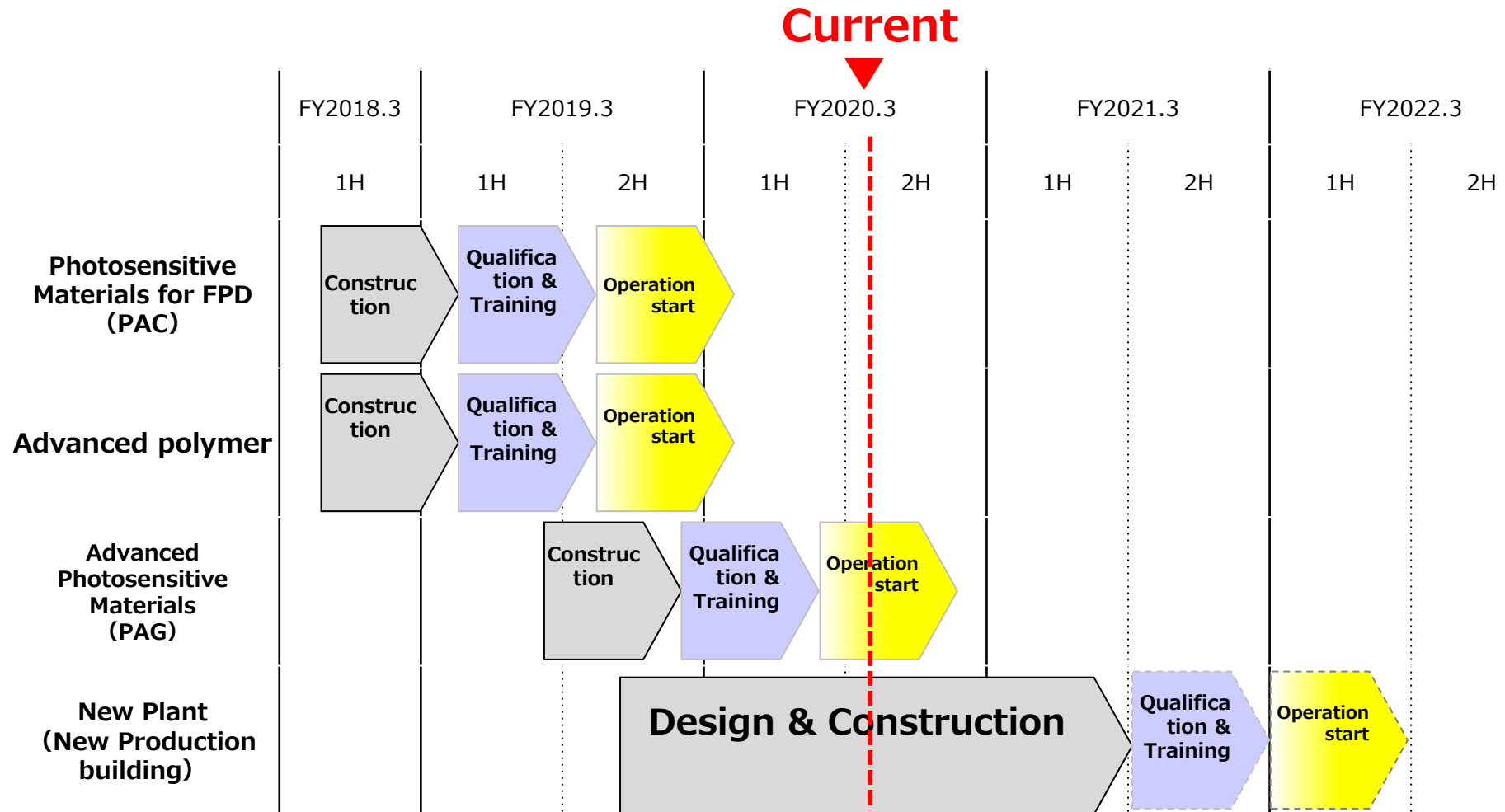
- Continue down size of photoresist line width need EUV process
- Started mass production supply for EUV materials in 2019
- TGC continue to improve quality of photosensitive materials and diversifying product line up to satisfy customer's needs

= stagnant
 = growing

		FPD		IC								
		g + h + i line	I line	G line	I line	KrF	ArF	ArF Immersion	ArF DP	ArF MP	EUV	
Node		~2,000nm	~1,000nm	~700nm	~200nm	~110nm	~65nm	~45nm	~22nm	~7nm	~5nm	~2nm ?
Application	TV, PC	Small & Mid size Panel	IGBT, LCD driver, LED	DRAM/NAND memory (recovery in 2020 as projection)				New generation DRAM (2020~)				
		Smart phone and etc.		Back-end process materials CMOS sensor	Advanced logic LSI ⇒ steady			New Generation Logic LSI Start EUV process in production				
Market	Stagnant	Stagnant and gradually growth	Gradually growth	expanding	stagnant	steady	expanding		CAPEX in progress		R&D	
TGC Products	Photo Active Compound (PAC) EL high purity solvents					Photo acid generator (PAG) Polymer EL Ultra high purity solvents						

Photosensitive Materials Capacity Up Investment

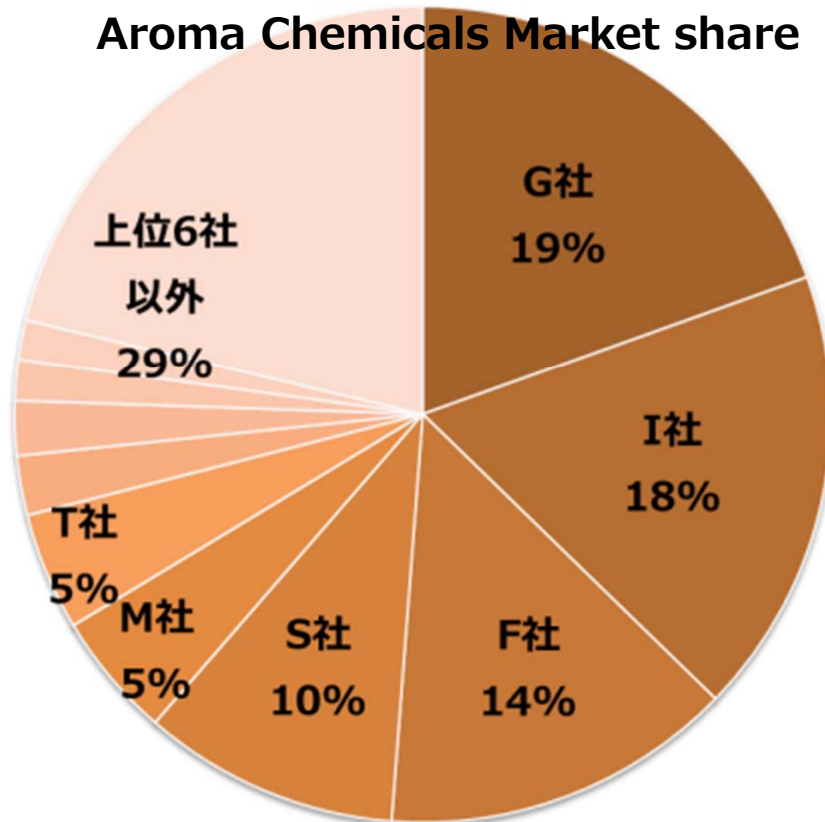
- On going capacity up project to meet market demand increasing
- Completed capacity up project for the existing plant as plan. After customers' qualification process, starting products shipment from new line accordingly.
- New production plant construction to be completed in 2020 as on going in the planned schedule.



Aroma Chemicals Market

世界香料市場シェア

Aroma Chemicals Market share

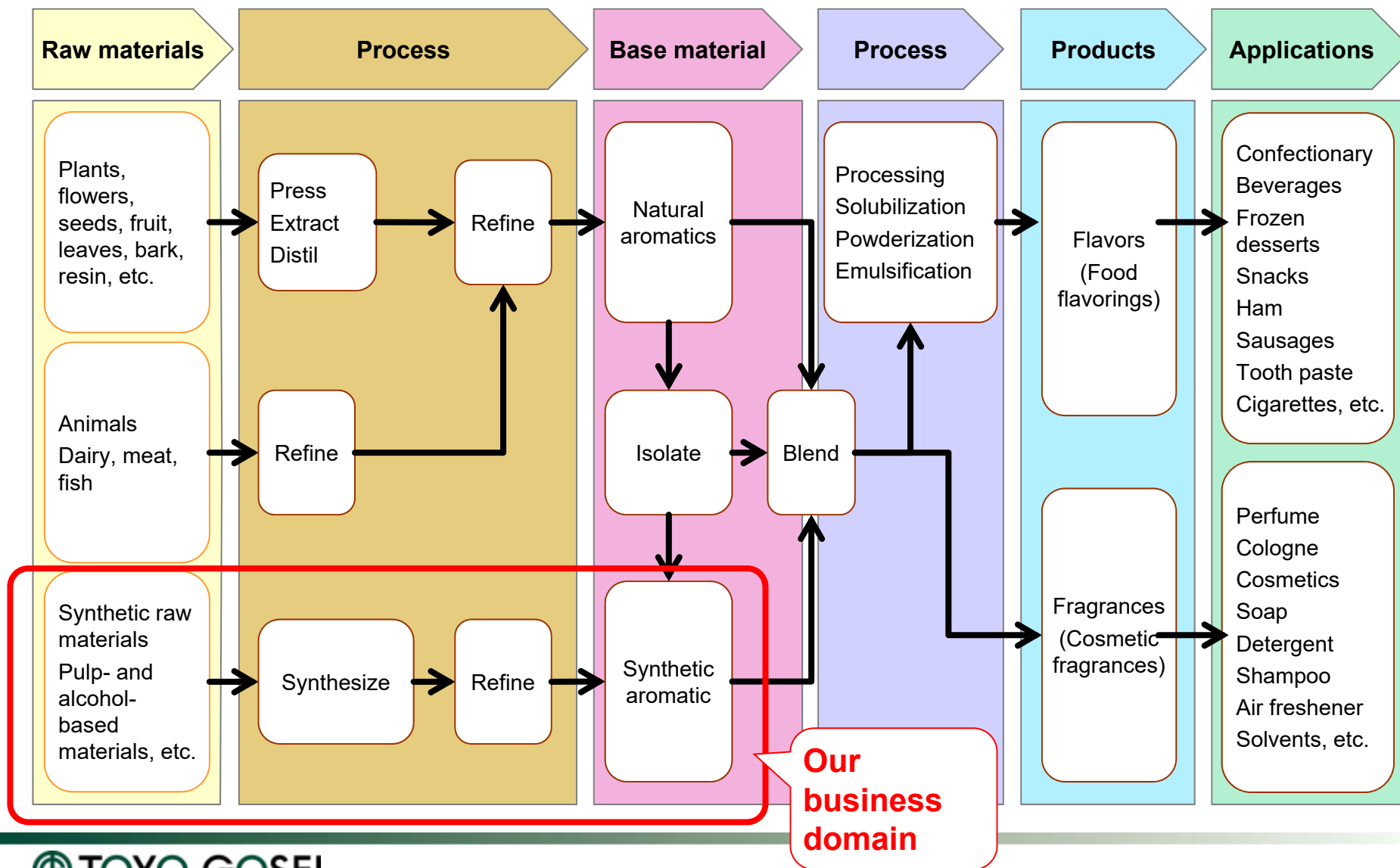


- The global aroma chemicals market is expanding at CAGR 3-4% steadily
- The top six suppliers dominate 70% of the global market.
- Major suppliers is actively doing the M&A to increase their global market share, which is lead to oligopolization.
- TGC is a few selected aroma chemical key materials to mainly major global aroma chemicals companies. Our market share is estimated around 30-40% in our segment
- Global niche top position

出所 : Leffingwell & Associates

Business Overview Chemicals (Aroma Chemicals)

Aroma chemical flow from raw materials through to finished products



Logistic Business (Advantage of Takahama Chemical Oil terminal)



Terminal has 65 bonded storage tanks with various volumes, capable of holding chemicals with different grades and properties



Receives 70 vessels per month



Largest shipment volume in the Kanto region: 80-100 Tank lorry car per day

- Toyo Gosei's chemical logistics terminal distributes liquid chemicals made in Japan or overseas to plants across the Kanto region-biggest chemicals distribution hub as largest shipment volume in Tokyo bay area
- Only chemical tank terminal run by chemicals company and handling variety of package, own certified analytical laboratory for the high-quality storage management as providing service for wide range chemicals
- Prime location close to expressway network (about a few minutes from Chidoricho IC) shorted delivery time to northern Kanto area where are major chemical users located. Possible to three round delivery a day is appreciated by customers in shortage of tank lorry driver.
- Strict regulations in the Fire Service Act make it difficult for new competitors to establish new operations in the Tokyo Bay area

Logistic Business model



① Liquid chemicals made in Japan or overseas coming to Takahama by chemical tanker



② Transfer chemical to tank from tanker



③ Storage at tank



④ Transfer chemicals to tank lorry and other package from tanks



⑤ Deliver to users in Tokyo metropolitan area

Completion of New Expressway contribute turnover rate

- Completion of Tokyo-Gaikan Expressway in 2018 further improved transport access to northern Kanto area as shortening delivery time
- # of Round trip per day increased which contribute higher operation rate at Takahama chemical oil terminal



独創的な視点で世界へ

Individual Development, to the global Chemical



(Notes regarding projection)

The earnings forecasts in this document are estimation based on the information currently available and the judgment obtained from the news so far.

Therefore, the actual business results may differ significantly from this business forecast due to various factors and risks.

There is a possibility that it will be, and we do not make any commitments or guarantees.