

# G'TOAGOSEI

## Financial Results for 2Q FY2018

#### August 8, 2018

This document is a translation of the official Japanese version provided for information purpose only.

#### Scope of consolidation Number of consolidated subsidiaries: 20 (no change) Number of equity-method affiliates: 2 (no change)

TOAGOSEI

	2017 2Q	2018 2Q	Char	nge
Net sales (Millions of yen)	70,743	73,148	2,404	3.4%
Operating income (Millions of yen)	8,793	7,801	-991	-11.3%
Operating income ratio	12.4%	10.7%	-1.7%	—
Ordinary income (Millions of yen)	9,381	8,299	-1,082	-11.5%
Net income attributable to owners of parent (Millions of yen)	6,584	5,998	-586	-8.9%
Net income per share (Yen)	50.02	45.57	-4.45	
Interim dividend [annual dividend] (Yen)	13.0(26.0)	14.0(28.0)	1.0(2.0)	

<Business Environment>

TOAGOSEI

- •The Japanese economy made a mild recovery.
- •The economies of developed countries and Asian emerging countries also remained robust.
- •Costs for raw materials, fuels, logistics, etc. increased along with a rise in oil price.
- < Financial Results for 2nd Quarter of FY2018>
  - Income increased but profit decreased in the three segments of Commodity Chemicals, Polymer & Oligomer, and Plastics. Income and profit from Performance Chemicals increased due to a strong demand for semiconductors. Income and profit from Adhesive Material decreased due to weak sales of high-value-added products, etc.
  - 2. A price raise of upstream products proceeded well but there was a delay in adjustments of prices of downstream products.
  - 3. Fixed expenses increased along with active capital investments and facility upgrades.

Toagosei (Thailand)'s Phase 1 acrylic polymer plant construction completed,

expansion of high-value-added product production, etc. proceeded well.

#### **Consolidated Results (by Segment)**

#### Net sales (by consolidated segment)

G. TOAGOSEI

	lielette ei e e gri			ongoo in not col		
	2017 2Q 2018 2Q		Cn	Changes in net sales		
			Volume	Unit price	Change	
Commodity Chemicals	32,684	33,887	-404	1,607	1,203	
Polymer & Oligomer	13,850	14,531	651	30	681	
Adhesive Material	5,938	5,849	-35	-53	-88	
Performance Chemicals	3,773	4,023	285	-35	249	
Plastics	12,838	13,253	451	-35	415	
Other	1,658	1,602	-56	0	-56	
Total	70,743	73,148	891	1,513	2,404	
Operating income (	by consolida	ted segment	)		(Millions of yen)	
		7 2Q	2018			
	Operating income	Operating income ratio	Operating income	Operating income ratio	Change	
Commodity Chemicals	2,985	9.1%	2,709	8.0%	-276	
Polymer & Oligomer	2,302	16.6%	1,731	11.9%	-571	
Adhesive Material	1,400	23.6%	1,270	21.7%	-130	
Performance Chemicals	1,188	31.5%	1,316	32.7%	127	
Plastics	791	6.2%	673	5.1%	-118	
Other/adjustments	123		101	—	-22	
Total	8,793	12.4%	7,801	10.7%	-991	

# Other Income/Expenses and Extraordinary Income/Loss (Consolidated)

[Other income/expenses]

(Millions of yen)

[Extraordinary income/loss]

(Millions of yen)

	2017 2Q	2018 2Q	Change
Interest and dividend income	480	465	-14
Equity in earnings of affiliates	208	141	-66
Rent income on non- current assets	48	131	82
Miscellaneous income	104	82	-22
Foreign currency exchange loss	(89)	(153)	-64
Interest expense	(48)	(46)	2
Environment readiness fee	(53)	(57)	-3
Cost of idle assets	(34)	(32)	2
Miscellaneous expenses	(27)	(32)	-5
Total	588	498	-90

• Equity in earnings of affiliates

(Millions of yen)

	2017 2Q	2018 2Q	Difference
Elmer's & Toagosei	183	132	-51
Chubu Liquid Oxygen	25	10	-15
Total	208	141	-66

	2017 2Q	2018 2Q	Change
Gain on sales of non-current assets	369	5	-364
Gain on sales of investment securities	6	0	-6
Subsidy income	35	323	288
Loss on disposal of non-current assets	(184)	(50)	134
Total	227	278	50

 Gain on sales of non-current assets FY2017: Sale of idle land in Nagoya

Subsidy income

Subsidy to promote energy efficiency investment

Loss on disposal of non-current assets
FY2017: Takaoka Plant building removal expenses

•Exchange rate (Yen/USD)

Jun. 30, 2017	Dec. 31, 2017	Jun. 30, 2018
112.00	113.00	110.54

#### **Consolidated Balance Sheet**

			(Millions of yen)
	Dec. 31, 2017	Jun. 30, 2018	Change
Cash and deposits	29,636	34,527	4,891
Notes and accounts receivable	42,583	40,551	-2,032
Securities	47,000	46,000	-1,000
Inventories	16,005	15,643	-362
Other current assets	2,048	1,936	-111
Non-current assets	63,168	63,309	141
Investment ①	35,238	32,304	-2,933
Other non-current assets	3,657	4,049	392
Total assets	239,338	238,322	-1,015
Notes and accounts payable	15,149	14,091	-1,058
Bank loans and debt	12,150	11,770	-379
Accrued income taxes	2,124	2,339	214
Other liabilities ②	22,426	20,700	-1,725
Total liabilities	51,850	48,901	-2,948
Total net assets ③	187,487	189,420	1,932
Total liabilities and net assets	239,338	238,322	-1,015

TOAGOSEI

#### (Milliona of yon)

#### [Balance Sheet]

(1) Market value of investment securities decreased because of a downturn of the stock market.

②Accounts payable for capital expenditures decreased.

③Retained earnings increased by 4,287 million yen.

#### Cash Flows

	2017 2Q	2018 2Q	Change
Cash flows from operating activities	9,568	14,176	4,607
Cash flows from investing activities	(7,147)	(6,988)	158
Free cash flow	2,421	7,188	4,766



(Millions of yen)

	Company name	Segment	Ownership (%)	Net s	ales	Operating in	come (loss)	Net incor attributable t par	o owners of
				2017 2Q	2018 2Q	2017 2Q	2018 2Q	2017 2Q	2018 2Q
1	Toa Techno-Gas	Commodity Chemicals	100	2,252	2,468	245	344	179	247
2	(Oita Chemical)	Ļ	91.15	5,653	6,556	(9)	18	(28)	(32)
3	Toagosei Singapore	Ļ	100	3,924	3,494	356	(2)	383	28
4	(MT Ethylene Carbonate)	Ļ	90	240	305	1	2	1	2
5	MT AquaPolymer	Polymer & Oligomer	51	5,126	5,196	476	308	337	220
6	Taiwan Toagosei	Ļ	100	505	510	57	25	46	18
7	Toa-Jet Chemical	Ļ	51	546	891	13	29	11	31
8	TOA-DIC Zhangjiagang Chemical	Ļ	76.12	794	891	38	94	39	74
9	Toagosei (Thailand)	Ļ	100	-	-	(31)	(99)	(31)	(99)
10	Toagosei America	Adhesive Material	100	1,119	945	147	74	149	95
11	(Aron Packaging)	Ļ	100	129	140	(2)	9	(1)	6
12	Toagosei Hong Kong	Ļ	100	174	143	25	13	115	60
13	Toagosei (Zhuhai)	Ļ	100	173	195	28	42	17	31
14	Aronkasei	Plastics	100	12,842	13,264	792	673	576	538
15	ТОА Кодуо	Other	100	520	496	5	9	5	8
16	Toa Business Associe	Ļ	100	552	847	40	28	28	20
17	TG Corporation	Ļ	100	6,007	5,828	185	150	128	103
18	(Toa Logistics)	Ļ	100	2,501	1,238	10	14	7	10
19	(Shikoku Toa Logistics)	Ļ	70	586	634	7	3	5	2
20	(Hokuriku Toa Logistics)	Ļ	90	117	116	0	0	0	0
	Simple aggregation			43,760	44,157	2,383	1,734	1,966	1,362

Company names in parentheses indicate that almost all of their transactions are with the Company.



Domestic economy is expected to maintain a recovery trend and demand for chemical products is expected to be strong, but there are concerns over intensified trade war originating in the U.S. and fluctuations in financial and capital markets.

### "2018 is (still) the year of Endurance"

Focus on efforts toward labor-saving and streamlining, realize price adjustments, and achieve early contribution of new and expanded facilities to profits.



#### **Consolidated Results Forecast for FY2018**

(Millions of yen)

(***						
		FY2017 (A)	FY2018 1H	FY2018 2H (forecast)	FY2018 forecast (B)	Change (B-A)
Net sales		144,708	73,148	75,852	149,000	4,292
Operating income		17,453	7,801	9,699	17,500	47
Operating income ratio		12.1%	10.7%	12.8%	11.7%	-0.4%
Other income/expenses		1,039	498	202	700	-339
Ordinary income		18,492	8,299	9,901	18,200	-292
Extraordinary income (loss)		203	278	522	900	697
Income before income taxes	(a)	18,695	8,578	10,422	19,100	405
Income taxes	(b)	5,445	2,445	3,355	5,800	355
Tax rate	(b)/(a)	29.1%			30.4%	1.3%
Net income attributable to non-controlling interests		339	134	66	300	-39
Net income attributable to owners of parent		12,911	5,998	7,002	13,000	89
Dividend (Yen)		26.00	14.00	14.00	28.00	2.00
<reference></reference>						
Average exchange rate	(Yen/USD)	¥112.65	¥109.16	¥110.00		
Naphtha price	(Yen/kl)	¥40,425	¥48,300	¥50,000		

Note: Change of 1,000 yen in naphtha price per kl will have an impact of  $\pm 300$  million yen on the Company's performance.

Depreciation of yen by 1 yen/USD will have an impact of -60 million yen on the Company's performance.



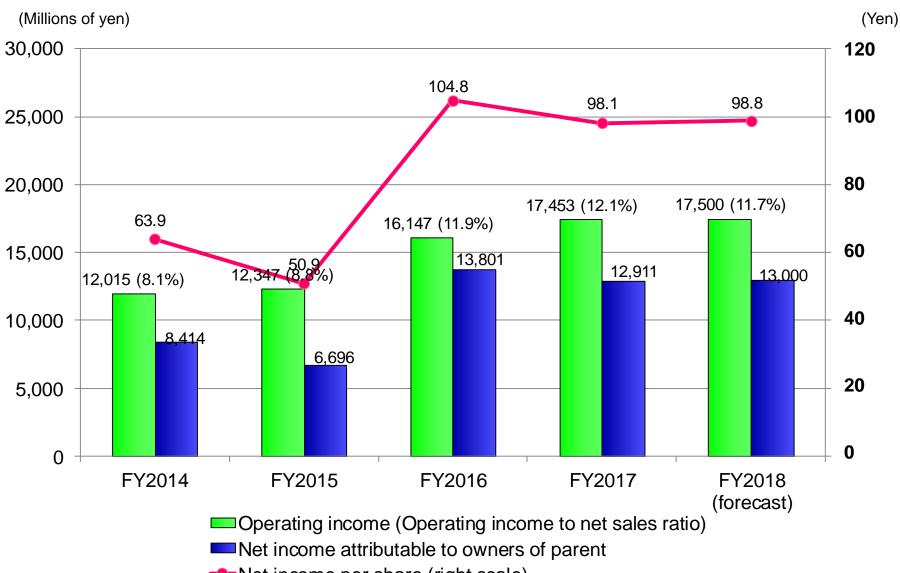
#### **Consolidated Results Forecast for FY2018 (by Segment)**

Net sales

	FY2017 results		2018 cast	Change			Factors for change	
Commodity Chemicals	66,630	6	67,200	57	70	[Increase] Ca	ustic soda [Decrease] Acrylic monomer	
Polymer & Oligomer	28,096	3	30,100	2,00	)4	[Increase] Ac	rylic polymer, UV-curable resin, flocculants	
Adhesive Material	12,010		12,400	39	90	[Increase] Fu	nctional adhesives	
Performance Chemicals	7,791		8,300	50	)9	[Increase] Liq	uefied hydrogen chloride	
Plastics	26,828	2	27,700	87	72	[Increase] Piping equipment, products for construction civil engineering, nursing care products, elastomer compounds		
Other	3,350		3300	-5	50			
Total	144,708	14	19,000	4,29	92			
Operating inco	me		Figures	in square bra	cke	ets are opera	ting income (Millions of yen)	
	FY2017 re	sults	FY20	18 forecast		Change	Factors for change	
Commodity Chemicals	5,795	[8.7%]	6,3	00 [9.4%	6]	505	[Increase] Caustic soda [Decrease] Acrylic monomer	
Polymer & Oligomer	4,429 [′	15.8%]	3,8	00 [12.6%	6]	-629	[Decrease] Acrylic polymer, UV-curable resin, flocculants	
Adhesive Material	2,659 [2	22.1%]	2,7	00 [21.8%	6]	41		
Performance Chemicals	2,397 [3	30.8%]	2,6	00 [31.3%	6]	203	[Increase] Liquefied hydrogen chloride	
Plastics	1,946	[7.3%]	1,9	00 [6.9%	6]	-46	[Increase] Nursing care products, products for construction and civil engineering [Decrease] Piping equipment	
Other	225	-	2	- 00		-25		
Total	17,453 [*	12.1%]	17,5	00 [11.7%	6]	47		

#### **Historical Consolidated Results**

**G**•TOAGOSEI

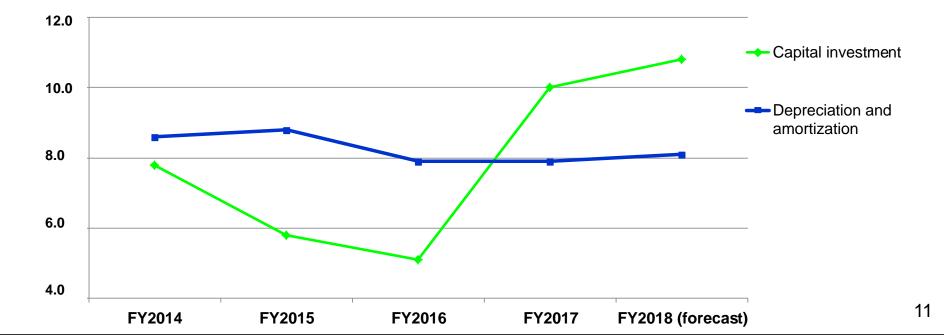


--Net income per share (right scale)

\* The Company conducted a 1-for-2 stock consolidation of its common stock whose effective date was July 1, 2015. Net income per share is calculated based on the assumption that the stock consolidation was conducted at the beginning of each fiscal year.

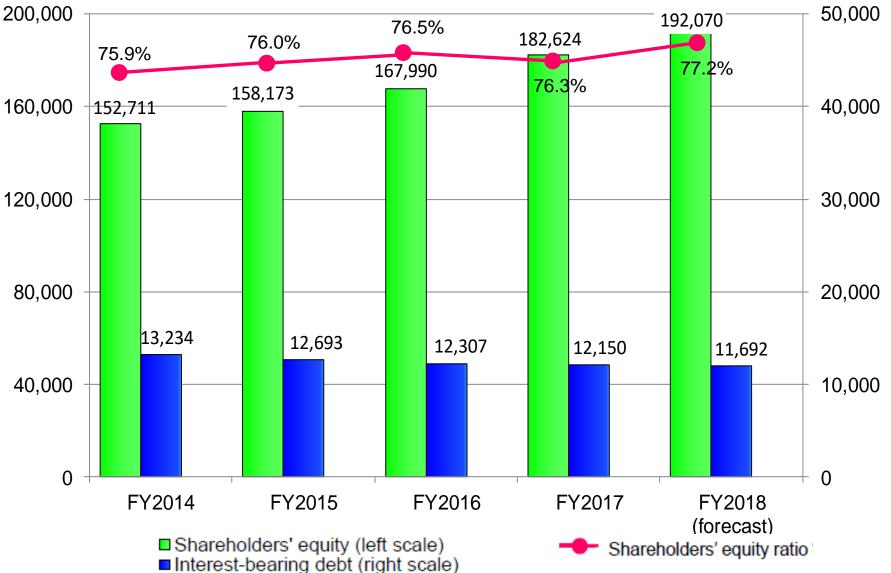
G. TOAGOSEI

	FY2014	FY2015	FY2016	FY2017	FY2018 forecast
Depreciation and amortization	8.6	8.8	7.9	7.9	8.1
Capital investment	7.8	5.8	5.1	10.0	10.8
Research and development expenses	3.9	3.7	3.6	3.7	3.7
Overseas sales	24.8	23.1	21.6	24.2	24.5
Interest-bearing debt	13.2	12.6	12.3	12.1	11.6



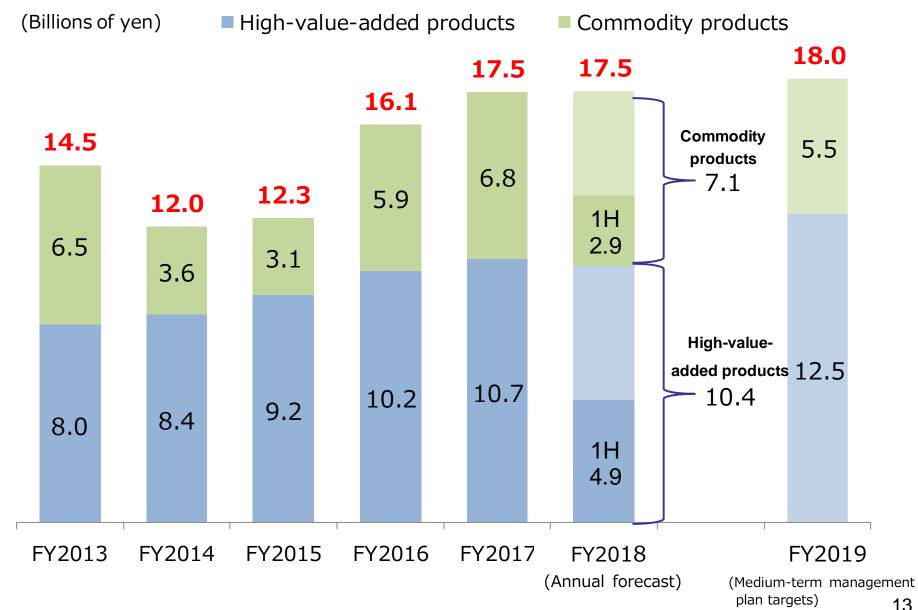
(Millions of yen)

**TOAGOSEI** 



Medium-Term Management Plan "Trajectory Toward Growth 2019" **Operating Income Trend** 

TOAGOSEI



### Phase 1 project

TOAGOSEI

#### Completion of an acrylic polymer plant

Highly-functional and high-value-added acrylic polymer manufacturing facilities completed on July 5, 2018.

⇒ A full-scale marketing in the Southeast Asian market is planned to achieve a high utilization rate at an early stage.

### Phase 2 project

# Start of an elastomer compound business plan

Construction is scheduled to start in September 2018. A sales company Aronkasei (Thailand) Co., Ltd. was established in July 2018 and is scheduled to start operation in autumn this year.

#### Completion ceremony





TOAGOSEI

### Polymer & Oligomer Segment

# Completion of polymer manufacturing facilities for LIB components

Polymer manufacturing facilities for LIB electrodes completed on August 1. A full-scale entry into the growing Electric Vehicle material market.

# Development of "Aronix Sheet®," a resin alternative to glass

Well received by the market for its "hard" and "chip-proof" quality and functions used for displays for smartphones and automobiles. Efforts are underway for mass production.





# New development of an injectable material as a measure against liquefaction

Newly developed a polymer-based soil improvement agent, which is stronger and more durable than that made using liquid glass (silicate soda). Its technical advantages will be presented at the Japan Society of Civil Engineers and other occasions. Preparations are being made for full-scale market launch from next year.

### **Adhesive Material Segment**

# Development of "Aron Mighty AF700," a low dielectric constant adhesive film

We developed an adhesive agent for FPC compatible with 5G and other high speed telecommunication. Intended to be used as components for smartphones and telecommunication base station antennas.

#### Market launch of an elastic instant glue

We developed a new product which can glue elastic adherends.

This product is marketed for precision equipment, construction and civil engineering applications. We are accelerating the development of automobile and other fields.



#### Forthcoming launch of "ShoeGoo × Aron Alpha"

This product was newly developed as an adhesive agent for shoes and sporting uses. Product announcement is scheduled at the DIY Show (August 23 through 25 at Makuhari Messe).

### **Performance Chemicals Segment**

# Expansion of production and shipment capacity of high-purity liquefied hydrogen chloride

Cutting-edge manufacturing and filling equipment is under construction at the Yokohama Plant to respond to high quality requirements and

increased demand in the semiconductor industry. Shipping equipment for mass transportation (ISO tube container filling equipment) will start operation shortly at the Tokushima Plant.

### **Plastics Segment**

TOAGOSEI

#### Strong sales of "ATTOGRIP AT-C series"

The ATTOGRIP AT-C series are handrails that can be easily installed by simply placing them on the floor, without the need of making holes in a floor or a wall. These are Japan's first rental nursing care products covered by the nursing care insurance and are well-received as products supporting the life of those who experience difficulty in moving their bodies.

### Manufacturing facilities at the Yokohama Plant



#### Indoor installation image





#### New R&D bases

# Establishment of "Tokyo Techno Lab," a product development base

This facility was established in April 2018 as a new product development base primarily for providing technical support to users in the Tokyo metropolitan area, strengthening new material development, and joint development with users.

#### Opening ceremony



### Aron Alpha online advertisement

# Big hit of "Kimi ni, Kuttsuke!", an online short video to empower youths

Aron Alpha appears as an item that plays a key role in bringing together the two teenagers in a young romance story.

\*This advertisement ranked third in the YouTube advertisement ranking.

XJapan YouTube Ads Leaderboard for the first half of 2018

