



TOK Medium-Term Plan: Review of the Past Two Medium-Term Plans

TOK Medium-Term Plan 2015 (FY2014/3–FY2016/3)

In 2012, TOK established customer-oriented sites that use an integration of “the trinity” platform covering development, manufacturing, and sales in South Korea where the semiconductor industry was displaying remarkable growth, and accelerated its strategy of building close relationships with customers overseas, especially in the U.S., South Korea, and Taiwan, under the TOK Medium-Term Plan 2015.

Management Objectives/Features

- ◻ Deepen and expand existing business domains
- ◻ Swiftly launch new business domains
 - ◆ Surpass record-high profits
 - ◆ Carry out large-scale investment to enhance business foundations that support sustainable growth
 - ◆ Expand business domains to include the renewable energy field



Results

- ◻ Achieved record-high profits
FY2015/3 Operating income: ¥13.2 billion
- ◻ Strategy of building close relationships with customers made significant progress



TOK Advanced Materials Co., Ltd. (South Korea) TOK TAIWAN CO., LTD. (Taiwan)

Diversified earnings drivers

- ArF excimer laser photoresists:** Growth in North America
- KrF excimer laser photoresists:** Double-digit annual growth rates for Asia
- g-Line and i-Line photoresists:** Secured positive growth
- High-density integration materials:** Expanded to major OSAT manufacturers, made progress in developing new customers
- High-purity chemicals:** Succeeded in development and sales expansion of high-grade products

Strategy

Company-Wide Strategies

- Build close relationships with regional users
- Reform business portfolios
- Develop global personnel

Important Strategies

[Earnings drivers]

- Continue growth of semiconductor photoresists
- Capture business for advanced packaging materials
- Expand LCD materials by capturing demand related to high-resolution LCD panels for tablet devices and smartphones
- Continue multifaceted development of existing technologies that will contribute to sales
- Recover earnings in the Equipment Business, fully commercialize TSV equipment

[Strengthen business potential]

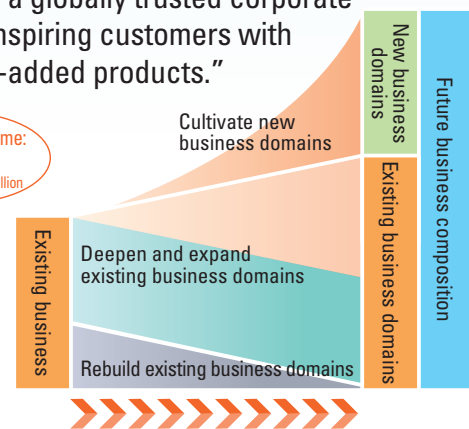
- Strengthen development of ArF excimer laser photoresists (for the 10nm level) to secure market share
- Develop next-generation clean solutions
- Develop new materials in the renewable energy field
- Enter the optoelectronics field

Long-Term Management Vision (formulated in 2010)

Overarching aspiration for 2020

“Aim to be a globally trusted corporate group by inspiring customers with high value-added products.”

Operating income:
¥20.0 billion



Major Indicators

	2014/3	2015/3	2016/3
Net sales	75,269	88,086	89,969
Material Business	72,866	84,611	87,280
Equipment Business	2,484	3,581	2,748
Operating income	10,025	13,253	12,438
Profit attributable to owners of the parent	7,549	8,818	7,716
Free cash flow	(2,610)	3,380	7,517
Capital investments	14,577	7,276	5,919
Depreciation and amortization	2,672	4,276	5,631
R&D costs	6,389	6,903	7,015
Cash dividends applicable to the year per share (Yen)	52.00	60.00	64.00
ROE (%)	5.8	6.2	5.3
Equity ratio (%)	87.5	84.3	85.1
Payout ratio (%)	30.9	30.5	36.1
Worldwide semiconductor market (Millions of U.S. dollars)*1	335,843	335,168	338,931
Exchange rate (¥/\$)*2	103	120	112

*1 Source: World Semiconductor Trade Statistics (calendar year) *2 As of the end of each fiscal year

TOK Medium-Term Plan 2018 (FY2017/3-FY2018/12)

Achieving record-high profits under the TOK Medium-Term Plan 2015 provided us with momentum for the overarching aspiration for 2020 (operating income of ¥20 billion), and TOK began proactive investments to focus on strengthening the management foundation and reforming business portfolios.

Positioning/Management Objectives/Features

- Key three years for achieving the overarching aspiration
- Continue striving to deepen existing business domains and swiftly launch new business
 - Continue proactive investments for the overarching aspiration
 - Aim for record-high profits in the final year
 - Aim for ROE of over 7% and enhance returns to shareholders



Results/Issues

- Strengthened R&D and production bases
Conducted capital investments of ¥21.7 billion



TOK TAIWAN CO., LTD.



New R&D Building at the Sagami Operation Center

- Leveraged strengths in the cutting-edge semiconductor field

EUV photoresists: Highly evaluated by major customers
KrF excimer laser photoresists: Adoption for 3D-NAND (Japan, Asia)/ Increasing demand accompanying expansion of 3D-NAND mass production (Japan, Asia)
High-density integration materials: Adoption for FOWLP (semiconductor field) by a major customer/Adoption by customers in Japan and overseas resulting in expanded adoption and application (electronic components field)
High-purity chemicals: Expanded adoption for next-generation process by a major customer (Asia)/Adoption of and increased demand for new clean solution (Asia, the U.S.)

- Midway through reforming business portfolios

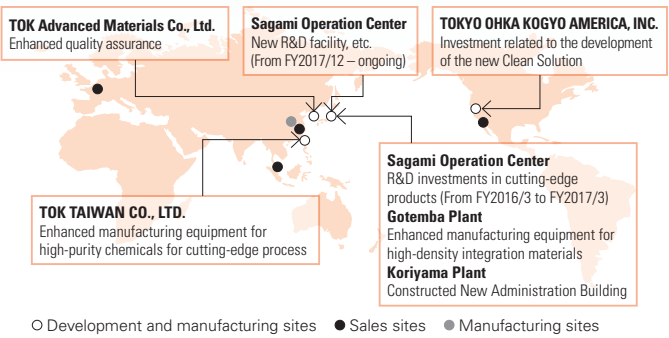
ArF excimer laser photoresists: A major customer did not adopt (Asia), and major customers' production plans delayed (Asia, the U.S.)
Equipment Business: Delayed expansion of 3D packaging process market
New business: Delay in commercializing focused themes (high-functional films, nanoimprint, etc.)

Strategy

Company-Wide Strategies

- [Reform business portfolios]
 - Renew mainstay products
 - Create new business/new materials
 - Recover earnings in the Equipment Business and develop versatile applications of TSV technology
- [Evolve strategy of building close relationships with customers]
 - Strengthen development of ArF excimer laser photoresists (10nm or less)
 - Further increase market share of KrF excimer laser photoresists (Thick-film photoresists for 3D-NAND)
 - Strengthen customer support structure in Chinese market
- [Develop global personnel]
 - Promote development of core human resources with a Group-wide perspective, as well as recruitment and promotion of diverse personnel appropriate for global business
- [Strengthen management foundation]
 - Build a governance system aiming to reduce risks accompanying globalization and to raise corporate value

Main Capital Investments under the TOK Medium-Term Plan 2018



Major Indicators

	2017/3	2017/12*1	2018/12
Net sales	88,764	92,411	105,277
Material Business	86,558	90,532	102,626
Equipment Business	2,252	1,921	2,697
Operating income	9,954	9,194	10,505
Profit attributable to owners of the parent	6,343	6,007	6,875
Free cash flow	(926)	4,169	6,298
Capital investments	9,378	6,731	5,636
Depreciation and amortization	6,118	6,035	7,063
R&D costs	8,207	6,921	8,526
Cash dividends applicable to the year per share (Yen)	64.00	64.00	96.00
ROE (%)	4.4	4.1	4.7
Equity ratio (%)	84.6	82.2	78.0
Payout ratio (%)	43.8	46.3	58.2
Worldwide semiconductor market (Millions of U.S. dollars)*2	412,221	468,778	412,086*4
Exchange rate (¥/\$)*3	112	113	111

*1 The fiscal year ended December 31, 2017 was an irregular nine-month period due to a change in fiscal year-end. *2 Source: World Semiconductor Trade Statistics (calendar year)
 *3 As of the end of each fiscal year *4 Forecast-based amount for 2019

Our Value Creation

Our Focus

Our Foundation

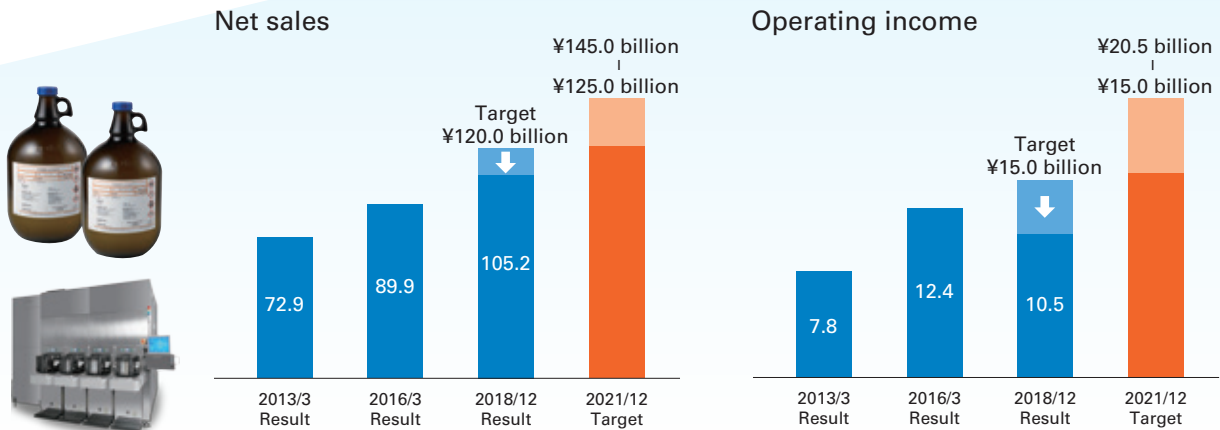
Data Section

Overview of the TOK Medium-Term Plan 2021

Management Vision

Aim to be a globally trusted corporate group by inspiring customers with high value-added products that have satisfying features, low cost and superior quality.

Performance/Targets



(Billions of yen)	2018/12 Result	2019/12 Forecast	2020/12 Target	2021/12 Target
Net sales	105.2	111.6*	120.0–130.0	125.0–145.0
Operating income	10.5	10.5*	13.5–15.0	15.0–20.5
ROE (%)	4.7%	—	—	Over 8.0%
Exchange rate (Yen/US\$)	111	105	105	105

* Figures announced on February 14, 2019

Features of the TOK Medium-Term Plan 2021

Point
1

Strengthen business portfolio reforms

⇒ Ambitiously develop the technologies required by 5G, IoT & Innovation

Point
2

Return to a growth trajectory

⇒ Operating income target: ¥15.0 billion to ¥20.5 billion (Fiscal year ending December 31, 2021)

Point
3

Strengthen balance sheet management and introduce a new dividend policy

⇒ A new dividend policy targeting a DOE of 3.5%

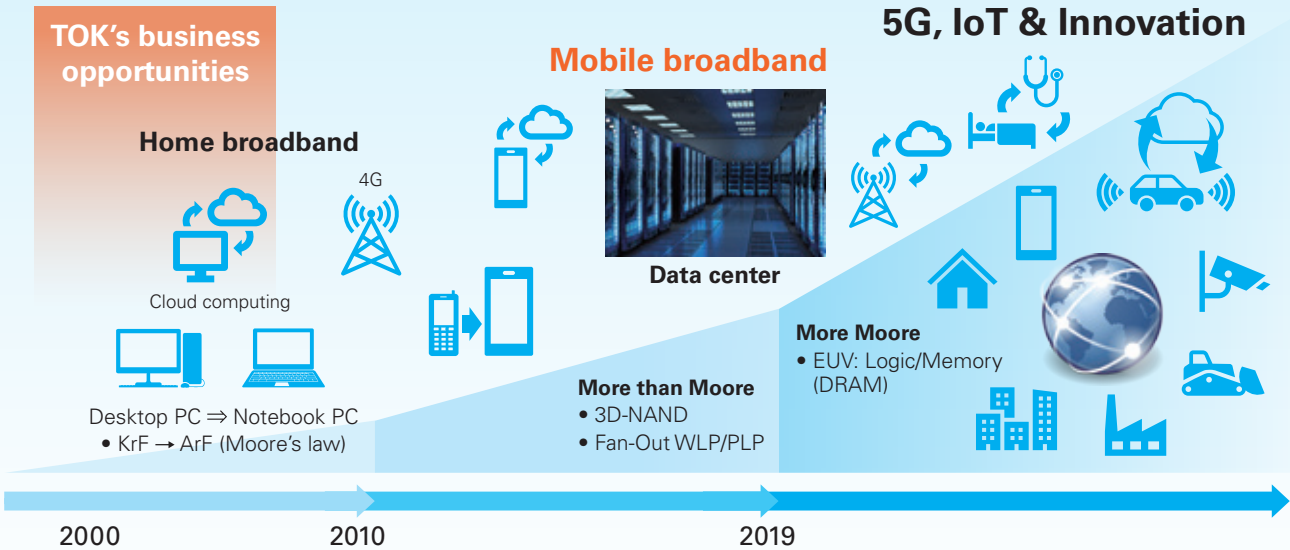
Dividends applicable to the year per share forecast = ¥120

(Fiscal year ending December 31, 2019)

⇒ Flexibly conduct share buyback as a means of returning profits to shareholders



Background and Aims behind Formulation



Business Strategy 1: EUV/ArF Photoresists

EUV photoresists to drive sales growth of cutting-edge photoresists
Expand sales of ArF excimer laser photoresists for the Chinese market

Business Strategy 2: KrF Excimer Laser Photoresists

Sales growth to be driven by growing demand arising from increased production of 3D-NAND, etc.

Business Strategy 3: High-Density Integration Materials

Strive to increase sales through advances in cutting-edge packaging technology

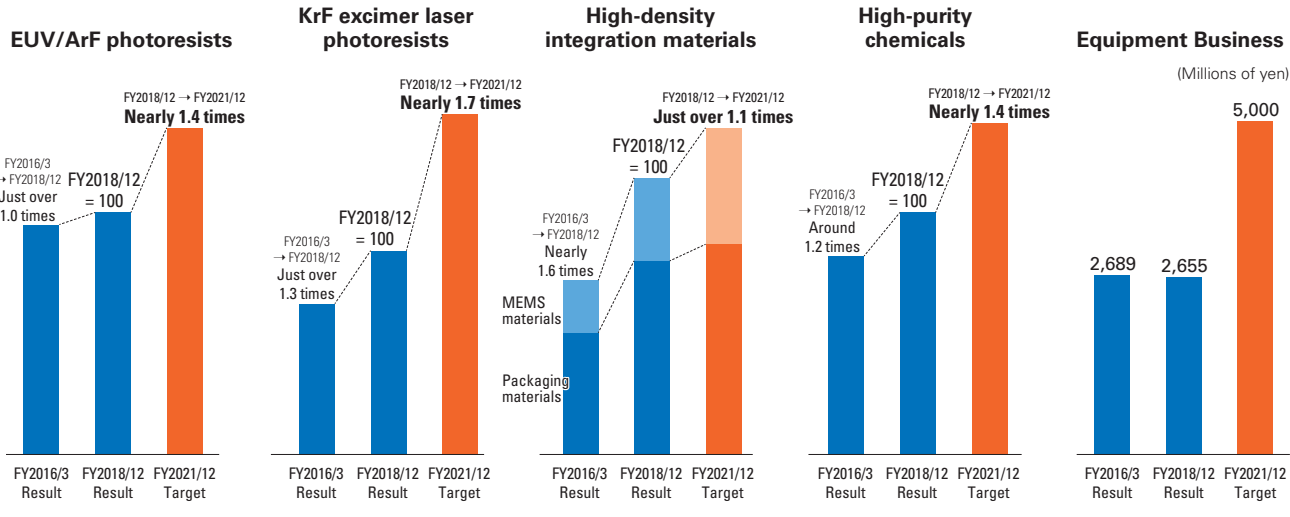
Business Strategy 4: High-Purity Chemicals

The U.S. and Asia are projected to contribute to increased sales

Business Strategy 5: Equipment Business

3D packaging and power devices are expected to grow/Increase orders based on TOK's track record
Development and manufacture of manufacturing equipment for next-generation displays

Sales Results and Target of Each Growth Driver



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Company-Wide Goal

“Cultivate niche markets that the TOK Group should develop”

Company-Wide Strategies

(1) “Accurately identify and rapidly address the customers’ voice to build an even larger and stronger pipeline to customers”

Rapidly and steadily work to develop a support structure rigorously focused on customer satisfaction along with R&D

(2) “Strengthen marketing, increase understanding of the customers’ value creation processes and translate these efforts into new value creation”

Through rigorous marketing, TOK will carefully identify solutions that lead to the creation of new value for customers as it makes intensive and proactive efforts to address those solutions.

(3) “Strengthen human resources who can perform research, make decisions, and take actions on their own initiative”

Bolster human resources that will pursue the possibilities of business with a variety of customers and continue to tackle challenges until they succeed

(4) “Strengthen TOK management foundation”

Focus on further sophisticating Group management, improving corporate governance, and promoting balance sheet management to utilize management resources more efficiently

Strategy for New Business

High-functional films

Secure new technological seeds as TOK’s core technologies and deploy them to multiple applications

Optical materials

Expand new materials fields such as nanoimprint materials and high refractive index materials

Life science-related materials

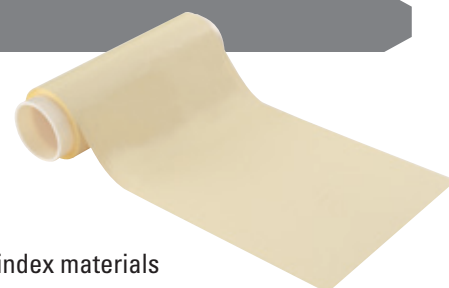
Commercialize photolithography-related technologies in the life sciences field

Collaboration/support

Drive new innovation through TOK’s core technologies and the outstanding technological capabilities of partner companies

Sagami Operation Center

Establish new technological seeds as core technologies



pixelligent
THE CLEAR SOLUTION™

Financial Capital Strategy: Balance Sheet Management

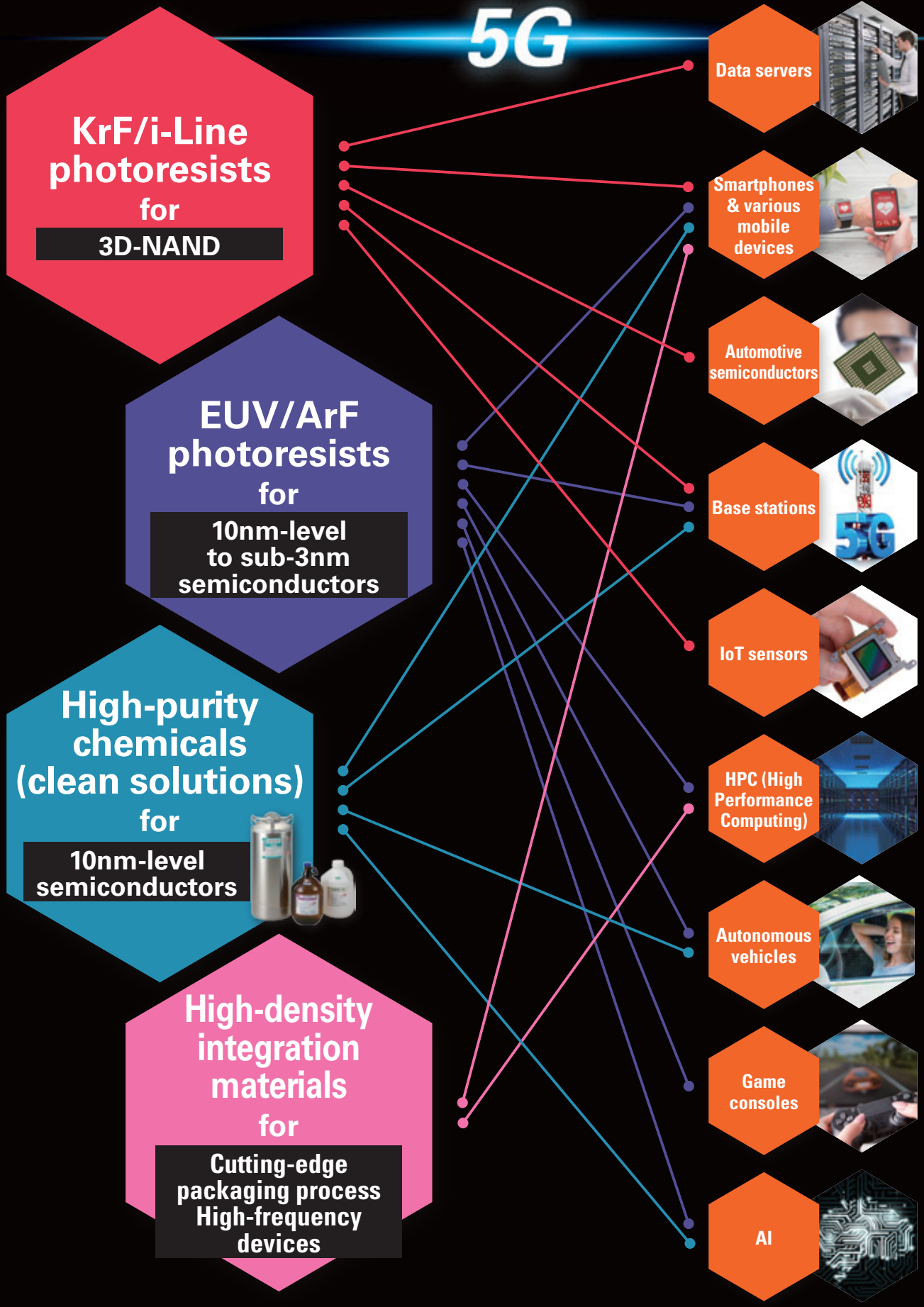
As a long-run R&D-driven company, TOK will pursue the optimal balance between investment, cash reserves, and shareholder returns.

(1) Pursuit of asset efficiency (2) Cash reserves (3) Shareholder return policy and dividend policy

5G and TOK's Products



5G



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