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**
  - 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

- **Swiftly launch new business domains**

### Results

- **Achieved record-high profits**
  - FY2015/3 Operating income: ¥13.2 billion

- **Strategy of building close relationships with customers made significant progress**

### 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

### 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.”

<table>
<thead>
<tr>
<th>Year</th>
<th>Net sales</th>
<th>Material Business</th>
<th>Equipment Business</th>
<th>Operating income</th>
<th>Profit attributable to owners</th>
<th>Free cash flow</th>
<th>Capital investments</th>
<th>Depreciation and amortization</th>
<th>R&amp;D costs</th>
<th>Cash dividends applicable to the year per share</th>
<th>ROE (%)</th>
<th>Payout ratio (%)</th>
<th>Exchange rate ¥/$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014/3</td>
<td>¥75,269</td>
<td>¥72,866</td>
<td>¥4,403</td>
<td>¥10,025</td>
<td>¥9,610</td>
<td>¥3,811</td>
<td>¥3,270</td>
<td>¥2,672</td>
<td>¥6,389</td>
<td>¥52.00</td>
<td>5.8</td>
<td>87.9</td>
<td>103</td>
</tr>
<tr>
<td>2015/3</td>
<td>¥88,086</td>
<td>¥84,611</td>
<td>¥5,811</td>
<td>¥13,253</td>
<td>¥8,118</td>
<td>¥3,380</td>
<td>¥7,276</td>
<td>¥4,276</td>
<td>¥6,903</td>
<td>¥60.00</td>
<td>6.2</td>
<td>84.3</td>
<td>120</td>
</tr>
<tr>
<td>2016/3</td>
<td>¥89,969</td>
<td>¥87,280</td>
<td>¥6,748</td>
<td>¥12,438</td>
<td>¥7,716</td>
<td>¥5,381</td>
<td>¥7,716</td>
<td>¥5,631</td>
<td>¥7,015</td>
<td>¥64.00</td>
<td>5.3</td>
<td>36.1</td>
<td>36.1</td>
</tr>
</tbody>
</table>

*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

**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
- Build a governance system aiming to reduce risks accompanying globalization and to raise corporate value
- 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 customer support structure in Chinese market
- 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
- 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**

- TOK Advanced Materials Co., Ltd.
  - Enhanced quality assurance
- Sagami Operation Center
  - New R&D facility, etc.
- TOK TAIWAN CO., LTD.
  - Manufacturing sites

**Major Indicators**

<table>
<thead>
<tr>
<th></th>
<th>2017/3</th>
<th>2017/12**</th>
<th>2018/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>88,764</td>
<td>92,411</td>
<td>105,277</td>
</tr>
<tr>
<td>Material Business</td>
<td>86,558</td>
<td>90,532</td>
<td>102,626</td>
</tr>
<tr>
<td>Equipment Business</td>
<td>2,252</td>
<td>1,921</td>
<td>2,697</td>
</tr>
<tr>
<td>Operating income</td>
<td>9,954</td>
<td>9,194</td>
<td>10,505</td>
</tr>
<tr>
<td>Profit attributable to owners of the parent</td>
<td>6,343</td>
<td>6,007</td>
<td>6,875</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>(926)</td>
<td>4,169</td>
<td>6,298</td>
</tr>
<tr>
<td>Capital investments</td>
<td>9,378</td>
<td>6,731</td>
<td>5,636</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>6,118</td>
<td>6,035</td>
<td>7,063</td>
</tr>
<tr>
<td>R&amp;D costs</td>
<td>8,207</td>
<td>6,921</td>
<td>8,526</td>
</tr>
<tr>
<td>Cash dividends applicable to the year per share (Yen)</td>
<td>64.00</td>
<td>64.00</td>
<td>96.00</td>
</tr>
<tr>
<td>ROE (%)</td>
<td>4.4</td>
<td>4.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Equity ratio (%)</td>
<td>84.6</td>
<td>82.2</td>
<td>78.0</td>
</tr>
<tr>
<td>Payout ratio (%)</td>
<td>43.8</td>
<td>46.3</td>
<td>58.2</td>
</tr>
<tr>
<td>Worldwide semiconductor market (Millions of U.S. dollars)**</td>
<td>412,221</td>
<td>408,778</td>
<td>413,584*</td>
</tr>
<tr>
<td>Exchange rate ($/¥)</td>
<td>112</td>
<td>113</td>
<td>111</td>
</tr>
</tbody>
</table>

*1 The fiscal year ended December 31, 2017 was an irregular nine-month period due to a change in fiscal year-end.  
*3 As of the end of each fiscal year. *4 Forecast-based amount for 2019
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

<table>
<thead>
<tr>
<th>Net sales</th>
<th>Operating income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013/3 Result</td>
<td>2014/12 Result</td>
</tr>
<tr>
<td>105.2</td>
<td>105.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating income</th>
<th>ROE (%)</th>
<th>Exchange rate (Yen/US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013/3 Result</td>
<td>2014/12 Result</td>
<td>2015/12 Result</td>
</tr>
<tr>
<td>10.5</td>
<td>10.5</td>
<td>10.5*</td>
</tr>
<tr>
<td>4.7%</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>111</td>
<td>105</td>
<td>105</td>
</tr>
</tbody>
</table>

* 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

TOK’s business opportunities

Mobile broadband

Home broadband

Cloud computing

Desktop PC ⇒ Notebook PC

• KrF ⇒ ArF (Moore’s law)

EUV/ArF photoresists

KrF excimer laser photoresists

High-density integration materials

High-purity chemicals

Equipment Business

Sales Results and Target of Each Growth Driver

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

EUV/ArF photoresists

KrF excimer laser photoresists

High-density integration materials

High-purity chemicals

Equipment Business

(Millions of yen)

2,689 2,655

5,000

Integrated Report 2018 037
Cultivate niche markets that the TOK Group should develop

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

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

**KrF/i-Line photoresists**
for 3D-NAND

**EUV/ArF photoresists**
for 10nm-level to sub-3nm semiconductors

**High-purity chemicals (clean solutions)**
for 10nm-level semiconductors

**High-density integration materials**
for Cutting-edge packaging process
High-frequency devices

---

**Data servers**

**Smartphones & various mobile devices**

**Automotive semiconductors**

**Base stations**

**IoT sensors**

**HPC (High Performance Computing)**

**Autonomous vehicles**

**Game consoles**

**AI**

TOKYO OHKA KOGYO CO., LTD.

Integrated Report 2018