**Macro environment surrounding the Ajinomoto Group**

**Growing world population**

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>0.6 billion</td>
<td>7.6 billion</td>
</tr>
<tr>
<td>Increase</td>
<td>55%</td>
<td>68%</td>
</tr>
</tbody>
</table>

- Food production needed by 2050 compared to 2005-2007: +60%
- Rising demand for food, water, and energy

**Global population aging**

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population over 65</td>
<td>2015</td>
<td>2050</td>
</tr>
<tr>
<td>Increase</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Rising needs for extending healthy life expectancy
- Rising demand for healthcare

**Climate change**

- Global average temperature by 2100: +4.8°C

- Accelerated decarbonization
- Physical damage from natural disasters
- Unstable materials sourcing
- Breakdown in supply chain
- Impact on health

**Rapid urbanization**

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban population by 2050</td>
<td>55%</td>
<td>68%</td>
</tr>
</tbody>
</table>

- New flow of goods
- Rising middle-income class
- Intense competition

**Food resources**

- Maximize limited food resources and provide more value
- Related SDGs

**Sustainable materials sourcing**

- Bioavailability impacts
- Postharvest control
- Eradication of child and forced labor

- Increased risk of raw material procurement failure due to delays in addressing social and environmental issues across the supply chain
- Increased risk of raw material procurement failure due to climate change

**Reduction of food loss and waste**

- Efficient use of materials
- Consumer satisfaction (sustainable consumption, etc.)
- Waste reduction in the distribution process

- Cost reduction through initiatives to reduce product returns and waste
- Depletion of food resources

**Global sustainability**

- Reduce impact of business activities for global sustainability
- Related SDGs

**Climate change adaptation and mitigation**

- Greenhouse gas emissions (Scope 1, 2, and 3)
- Energy management
- Resource efficiency

- Collaboration with outside organizations on decarbonization
- Increased production costs due to delays in initiatives to eliminate carbon emissions or increased carbon tax burden
- Procurement risk of sustainable raw materials
- Damaged corporate value due to delayed response to climate change

**Contribution to a circular economy**

- Waste reduction and Resource (Reduce, Reuse, Recycle)
- Product packaging

- Development of environmentally-friendly materials
- Decreased risk of raw material procurement failure due to climate change
- Ineffective use of products and services

**Conservation of water resources**

- Water and wastewater management
- Agriculture and livestock water use

- Production stagnation due to droughts, floods or water quality deterioration
- New raw material procurement failure due to water resource depletion

**Business foundation**

- Create a corporate group that grows sustainably
- Related SDGs

**Diverse talent**

- Employee engagement
- Diversity and inclusion
- Employee health, safety, and well-being

- Company growth by improving employee engagement
- Creation of an innovation environment
- Risking costs due to intense competition for human resources

**Strong corporate governance**

- Compliance
- Competitive behavior
- Intellectual property protection

- Enhancing corporate value
- Appropriate risk-taking
- Decreased competitiveness due to inability to adapt to digital technology advances

**Preparation for intense global competition**

- Business strategy and planning
- Early creation of innovation
- Open innovation

- Business strategy reform through digital disruption
- Creation from external collaboration
- Specialty creation through technological innovation

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**Ajinomoto Group corporate message**

Eat Well, Live Well.

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**Materiality items**

- Specific examples (providing 30 priority ESG items*)
- Related opportunities and risks (Opportunity • Risk)
- Key initiatives by the Ajinomoto Group

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*1 United Nations, 2017
*2 Food and Agriculture Organization of the UN, 2014
*3 UN, 2015
*4 Intergovernmental Panel on Climate Change, 2013
*5 United Nations (UN), 2017
*6 The 30 priority ESG items set by the Group have been incorporated.