Driving forces
The chemical industry includes companies that manufacture commodity chemicals, industrial gases, agricultural chemicals, and specialty chemicals. Because chemicals serve as inputs for all kinds of end uses, ranging from petroleum refining, food, automobile, textile to electronics, this industry is crucial for all sectors. Today, chemical companies contribute to sustainable development by supplying products with higher levels of performance, efficiency, and safety with lower environmental impact and risk. This requires that companies concentrate on multiple important issues such as innovation, product stewardship, operational eco-efficiency, health and safety, human capital development, and customer relationship management. Chemical companies must conduct product risk assessments to understand their hazardous properties and potential exposure to human and environmental impacts to mitigate and manage product risk. Companies can apply technological innovations not just product development, but also to operations in their pursuit of enhanced productivity and safety.

Sustainability leaders 2019

**SAM Gold Class**
- Koninklijke DSM NV Netherlands

**SAM Silver Class**
- Linde PLC United States

**SAM Bronze Class**
- LANXESS AG Germany
- Akzo Nobel NV Netherlands
- PTT Global Chemical PCL Thailand
- Clariant AG Switzerland

**Sustainability Yearbook Members**
- Indorama Ventures PCL Thailand
- Mitsubishi Chemical Holdings Corp Japan
- Evonik Industries AG Germany
- Solvay SA Belgium
- Braskem SA Brazil
- DowDuPont Inc United States
- DIC Corp Japan
- Ecolab Inc United States
- LG Chem Ltd South Korea
- International Flavors & Fragrances Inc United States
- Air Products & Chemicals Inc United States
- Incitec Pivot Ltd Australia
- Novozymes A/S Denmark

* SAM Industry Mover

Highlighted criteria & Dimension weight

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Weight</th>
<th>Criteria</th>
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</thead>
<tbody>
<tr>
<td>Economic Dimension</td>
<td>35%</td>
<td>Codes of Business Conduct</td>
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<td></td>
<td>Innovation Management</td>
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<td>Customer Relationship Management</td>
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<td>Environmental Dimension</td>
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<td>Operational Eco-Efficiency</td>
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<td>Climate Strategy</td>
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<td>Water Related Risks</td>
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<td>Social Dimension</td>
<td>32%</td>
<td>Occupational Health and Safety</td>
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<tr>
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<td>Human Capital Development</td>
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</table>

Industry statistics

- Number of companies in universe: 128
- Number of companies assessed in 2018: 106
- Assessed companies to total companies in universe: 83%
- Market of assessed companies to total market: 96%

Results at industry level

The box-and-whisker plot describes the distribution of scores in the industry, based on all assessed companies. More information is available in the Reading Instructions in the introduction.