



Chemicals

Driving forces

The chemical industry comprises companies that produce specialty and commodity chemicals, industrial gases, and agrochemicals--components that are critical to commercial/industrial production within other sectors. Examples include bulk polymers used to create synthetic materials within textiles and plastics, as well as specialty ingredients for health and wellness products. Companies that focus their innovation and product design efforts on developing products that are less environmentally harmful and which deliver resource efficiency gains to their customers will gain a competitive edge while reducing risk and potential liabilities. This requires a robust product stewardship process that encompasses a lifecycle perspective where renewable raw materials are used throughout production, while the use of hazardous substances are either eliminated or reduced. The main challenges for the industry include increasing operational eco-efficiency, climate change, water-related risks, and occupational health & safety concerns. Opportunities exist for more efficient manufacturing through, for example, greater use of proteins or enzymes as bio-catalysts which can be used in products to improve the speed/efficiency of chemical reactions and/or to replace traditional solvents and hazardous chemicals. Talent attraction and retention of skilled employees are essential to drive and support the innovation process.

Highlighted criteria

- Economic Dimension**
 - Codes of Business Conduct
 - Customer Relationship Management
 - Innovation Management
- Environmental Dimension**
 - Climate Strategy
 - Operational Eco-Efficiency
 - Product Stewardship
 - Water Related Risks
- Social Dimension**
 - Human Capital Development
 - Occupational Health and Safety

Sustainability leaders 2018

RobecoSAM Gold Class	
Akzo Nobel NV	Netherlands
Koninklijke DSM NV	Netherlands
RobecoSAM Silver Class	
Clariant AG	Switzerland
Indorama Ventures PCL*	Thailand
Praxair Inc	United States
PTT Global Chemical PCL	Thailand
RobecoSAM Bronze Class	
Evonik Industries AG	Germany
LANXESS AG	Germany
Mitsubishi Chemical Holdings Corp	Japan
Sustainability Yearbook Members	
BASF SE	Germany
Braskem SA	Brazil
DowDuPont Inc.	United States
Ecolab Inc	United States
Givaudan SA	Switzerland
LG Chem Ltd	South Korea
Linde AG	Germany
Novozymes A/S	Denmark
Solvay SA	Belgium

* RobecoSAM Industry Mover

Industry statistics

Number of companies in universe	124
Number of companies assessed by RobecoSAM in 2017	94
Assessed companies to total companies in universe (%)	76
Market capitalization of assessed companies to total market capitalization (%)	89

Results at industry level

Dimension	Average score	Best score	Dimension weight
Economic	55	94	35%
Environmental	50	95	33%
Social	53	96	32%

Total score

