



Semiconductors & Semiconductor Equipment

Driving forces

The emerging drivers of the semiconductor industry go far beyond the traditional PC market and include the Internet of Things, Artificial Intelligence, automotives, 5G and high-performance computing. Cybersecurity is increasing in importance as a strategic priority, as security should be included by design during chip R&D. Moore's law is slowing as integrated circuits become smaller so the semiconductor industry must investigate new architectures, materials and packaging to go beyond current scaling and performance constraints while also addressing the demand for low-energy-consumption products. To sustain a rapid pace of innovation, the industry will increase R&D investment, in turn necessitating talent development while attracting and retaining a skilled workforce. The industry must continue to improve its usage of ultra-pure water, sourcing of conflict minerals, energy and waste management, pollution prevention, and the promotion of projects to substitute hazardous materials.

Highlighted criteria & Dimension weight

- Economic Dimension 43%
 - Corporate Governance
 - Supply Chain Management
 - Innovation Management
- Environmental Dimension 34%
 - Operational Eco-Efficiency
 - Environmental Policy & Management Systems
 - Climate Strategy
 - Product Stewardship
- Social Dimension 23%
 - Talent Attraction & Retention
 - Human Capital Development

Sustainability leaders 2019

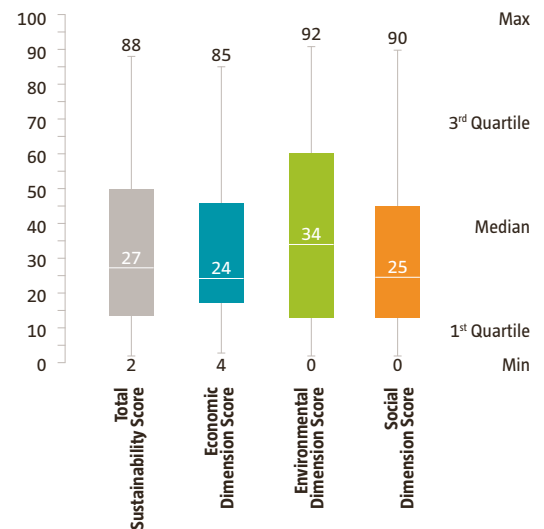
SAM Gold Class		●
ASE Technology Holding Co Ltd	Taiwan	
SAM Bronze Class		●
Nanya Technology Corp	Taiwan	
STMicroelectronics NV *	Italy	
Taiwan Semiconductor Manufacturing Co Ltd	Taiwan	
United Microelectronics Corp	Taiwan	
Sustainability Yearbook Members		●
Infinion Technologies AG	Germany	
ASML Holding NV	Netherlands	
Tokyo Electron Ltd	Japan	
SK Hynix Inc	South Korea	
NVIDIA Corp	United States	
ON Semiconductor Corp	United States	

* SAM Industry Mover

Industry statistics

Number of companies in universe	78
Number of companies assessed in 2018	56
Assessed companies to total companies in universe	72%
Market of assessed companies to total market	94%

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.