

Advanced Semiconductor Engineering Inc

SEM Semiconductors & Semiconductor Equipment

Member of DJSI World

Company Information

Country	Taiwan
Market cap (USD million)*	7,541

*Source: S&P Global BMI, 31 July 2016

Company Description

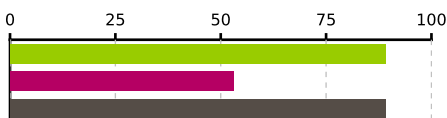
The Advanced Semiconductor Engineering Group (ASE) is the world's largest provider of independent semiconductor manufacturing services in assembly and testing. The group develops and offers complete turnkey solutions covering IC packaging, design and production of interconnect materials, front-end engineering test, wafer probing and final testing, as well as electronic manufacturing services. As a global leader, ASE provides a complete scope of services for the semiconductor market, driven by superior technologies, breakthrough innovations, and advanced development programs. The company is geared towards meeting the industry's ever growing needs for faster, smaller and higher performance chips. Headquartered in Kaohsiung, Taiwan, the company currently employs 67,000 employees and has manufacturing plants across Asia and offices in North America and Europe.

Industry Drivers

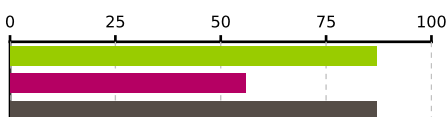
In order to keep pace with Moore's Law, which assumes that the number of integrated circuits doubles approximately every two years, continuous innovation is necessary. To ensure their long-term capacity to innovate, semiconductor companies must properly manage innovation processes and attract and retain a skilled workforce. High-quality research and development are important success factors. Shrinkage, migration to new materials, and the introduction of more efficient production processes are the dominant trends. Other challenges include energy-efficient production processes and low energy consumption chips and processors. Quality, performance and reliability must be monitored throughout the entire value chain. The semiconductor industry must also address the environmental impacts of its own operations by reducing the use of chemicals and hazardous substances, generating less waste, enhancing the energy efficiency of ultra-clean spaces, and reducing consumption of ultra-pure water. Considering the long lead time of capacity extensions, the semiconductor industry's extreme cyclicity is forcing companies to pay close attention to strategic planning and business cycle management.

Sustainability Scores

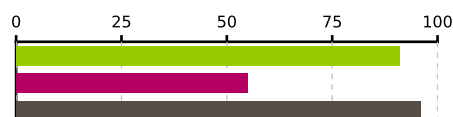
Total Scores



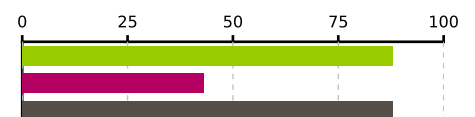
Economic Dimension



Environmental Dimension



Social Dimension

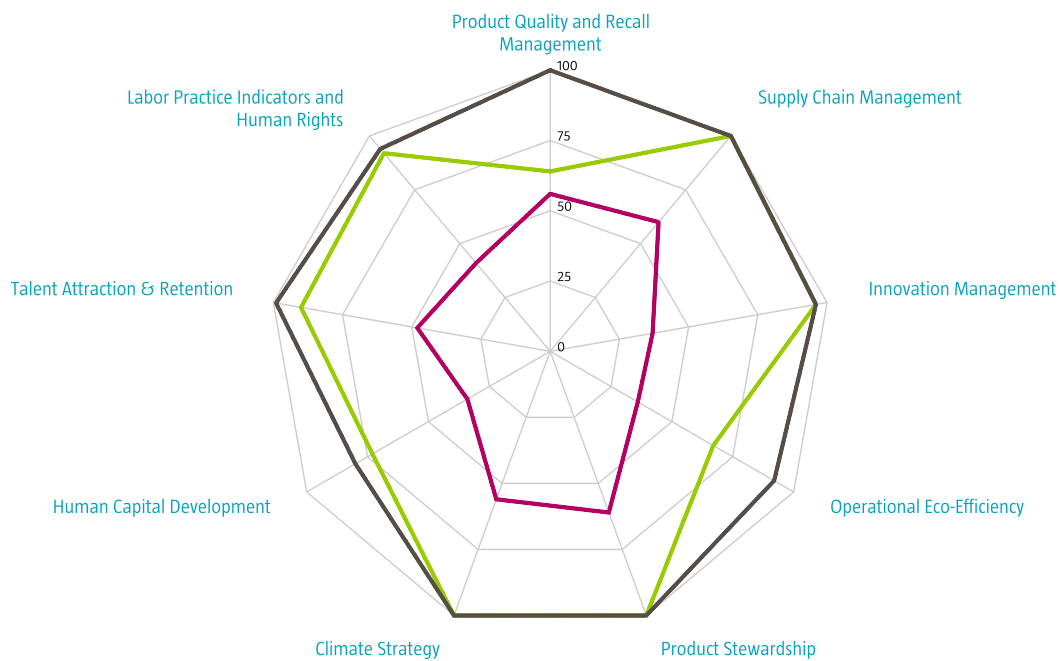


■ Industry best score ■ Industry average score ■ Advanced Semiconductor Engineering Inc

Sustainability Performance

ASE is committed to improving its eco-efficiency and protecting the environment via continuous recycling; reducing greenhouse gas emissions, waste generation, wastewater effluent, and chemical usage. The total water withdrawn by the company declined by 14% compared to 2014. In addition, total water recycled/ total water withdrawal went up to 82%, a 28% increase from 2014. The company added 2 gold-rated U.S. LEED Certifications in 2015, (12 certifications in total). Additionally, the company implemented 155 energy saving projects, which resulted in 106,808 MWh of energy savings. In 2015, OHS injuries went down by 29% and the company hired 6% more disabled persons than it did in 2014. Following a survey of 370 suppliers, 89% of them were determined to be compliant with its conflict minerals policy, demonstrating the company's leading supply chain management framework. The has developed a very robust human rights policy, with elaborate due diligence and assessment policies. These and many other initiatives in important, industry-relevant topics have contributed to the leadership position achieved by ASE in the Semiconductors & Semiconductor Equipment Industry Group this year.

Company Performance for Selected Criteria



■ Industry best score ■ Industry average score ■ Advanced Semiconductor Engineering Inc

For information on assessment criteria, visit www.robecosam.com/csa

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