



Addressing the Energy Challenge in GLOBALFOUNDRIES's Data Centre

GLOBALFOUNDRIES, the world's first full-service semiconductor foundry with a global manufacturing and technology footprint, is executing its Vision to reshape the semiconductor industry through innovation. With 13,000 employees and more than 160 customers around the world, GLOBALFOUNDRIES has quickly differentiated itself through collaboration with technology partners and customers to develop and produce semiconductors that are changing the ways we live, work and play.

In order to meet growing business demands, GLOBALFOUNDRIES's data centre environment became increasingly complex with expanded capabilities and converged systems. This also brought about significant increase in energy utilisation. As environmental sustainability is a core value of GLOBALFOUNDRIES, they are

committed to continually strive to minimise their data centre's environmental impact by implementing processes and technologies that reduce energy consumption.

To accomplish their goal of maximising energy efficiency, GLOBALFOUNDRIES adopted the Singapore Green Data Centres Standards: SS 564 Certification, which is the world's first energy and environment management systems standard, during the refurbishment of their legacy data centre.

GLOBALFOUNDRIES wanted to partner with a global specialist in energy management who has intimacy with all aspects of the data centre lifecycle. This puts Schneider Electric in a unique position as its extensive design and build experience enables them to accurately design, review, assess, and operate an energy efficient data centre, aligning with GLOBALFOUNDRIES



PROJECT AT A GLANCE

Company Name
GLOBALFOUNDRIES

Location
Singapore

BUSINESS CHALLENGE
Maximise the energy efficiency and reduce the environmental impact of GLOBALFOUNDRIES' legacy data centre.

corporate energy and sustainability effort.

Schneider Electric delivered a complete Data Centre Physical Infrastructure (DCPI) solution to help GLOBALFOUNDRIES expand and consolidate its IT architecture. Through standardisation and integrated power, cooling, racks, management and services, GLOBALFOUNDRIES's data centre is able to achieve high availability and agility as well as low total cost of ownership (TCO). Strict global standards and quality assurance processes underpinned Schneider Electric's approach in helping GLOBALFOUNDRIES attain the SS 564 Certification, thereby ensuring the highest quality, accuracy and scalability in their certification journey.

SS 564 Certification also requires GLOBALFOUNDRIES to constantly monitor and report their energy usage in alignment with the standard's metrics. By deploying a data centre infrastructure management (DCIM) system, metered rack PDUs and digital power meters, Schneider Electric enabled GLOBALFOUNDRIES to continuously track the facility's energy performance and efficiency as well as effectively manage the operations of their complex and mission-critical IT environment in real-time. These monitoring and



management tools not only allow GLOBALFOUNDRIES to achieve constant monitoring, but also set the foundation for continuous improvement.

Attaining the SS 564 Certification is a testament of GLOBALFOUNDRIES excellent energy and environment management practices. The newly optimised data centre enabled them to maximise their energy efficiency and improve their PUE. This helped them to gain the industry's recognition and build credibility, which enhance their competitive edge and open doors to new market opportunities.



SCHNEIDER ELECTRIC SOLUTIONS

Offer intimate knowledge of the data centre lifecycle as well as a comprehensive suite of DCPI solution and monitoring tools to help GLOBALFOUNDRIES adopt the Singapore Green Data Centres Standards: SS 564 Certification.

BUSINESS BENEFITS

Optimise energy savings and improved their PUE. The SS 564 Certification also helped them to earn the industry's recognition and increase their competitiveness.