

## Enhancing asset lifespan

**Voltage as a Service (VAAS)**<sup>TM</sup> is an energy-saving service solution for regulating and optimizing the voltage supplied to electrical equipment to the optimal level for efficient operation. The purpose of VAAS is to reduce energy consumption, lower electricity bills, and decrease carbon emissions by ensuring that electrical devices operate at their most efficient voltage level.

### Enhancing asset lifespan – electrical plant & equipment

By optimizing voltage levels, VAAS systems contribute to the longevity and reliability of electrical assets, leading to cost savings and reduced maintenance needs.

By maintaining optimal voltage levels and reducing electrical stress, VAAS systems help protect and extend the life of various components in the electrical infrastructure. These factors are set out in the following table.

Enhancement	Impact
<b>Reduction of Thermal Stress</b>	Excessive voltage increases the current flowing through electrical components, leading to higher temperatures. VAAS systems ensure that voltage levels are kept within optimal ranges, thereby reducing the thermal stress on transformers, cables, and other equipment.
<b>Decrease in Electrical Arcing</b>	High voltage levels can increase the likelihood of electrical arcing, which can cause damage to circuit breakers, switches, and other components. By optimizing voltage, VAAS systems help minimize arcing and reduce wear and tear on these components.
<b>Improved Power Quality</b>	VAAS systems help in maintaining stable voltage levels, which enhances the overall power quality. Improved power quality reduces the risk of voltage spikes and sags, which can damage sensitive electrical equipment and lead to premature failure.
<b>Extended Lifespan of Transformers</b>	Transformers operating at optimal voltage levels experience less strain and thermal stress, leading to a longer operational life and reduced maintenance needs. Voltage Optimization reduces the average load on transformers.
<b>Reduction in Insulation Degradation</b>	Excess voltage accelerates the degradation of insulation materials within electrical equipment. By stabilizing the voltage, VAAS systems help preserve insulation integrity and prevent breakdowns.
<b>Minimization of Equipment Overload</b>	Optimized voltage levels reduce the risk of equipment overloads by preventing excessive current flow. This helps in avoiding potential damage to circuit breakers, switches, and other critical infrastructure components.

### Summary

In summary, Voltage as a Service (VAAS) provides the right voltage to electrical equipment, ensuring efficiency, cost savings, and environmental benefits while maintaining equipment performance and longevity.

For further information, contact us at [sales@vaasco.net](mailto:sales@vaasco.net)

## VAASCO GROUP

VAASCO Group Ltd ABN 80 653 685 164  
corporate HQ – Suite 3, Level 10, 45 William Street, Melbourne VIC 3000 Australia  
correspondence - PO Box 7, Flinders Lane Victoria 8009 Australia