

## EMSc Asia Pacific

# ENERGY EFFICIENCY FINANCE

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# EQUIPMENT FINANCE SOLUTIONS

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## EQUIPMENT FINANCING SOLUTIONS

### Why Voltage is important

Most energy users are using more energy than they need to simply because their supply voltage is higher than it should be. Local grid voltages are on average high, and variable. For example, Australia wide the average supply voltage is 247 Volts; whereas, electrical equipment is designed to operate at 220 Volts. So, as energy consumption varies approximately as the square of voltage, the higher supply voltages cause higher energy usage of between 15% and 20%; and increased CO2 emissions. The excess energy usage is dissipated as heat, also shortening the life of valuable electrical equipment.

### Solution

The solution is to reduce and dynamically stabilise the voltage to the equipment nameplate voltage of 220 Volts. This is voltage optimization.

Voltage Optimisation (VO) is a dynamic method of managing the power delivery, specifically the voltage, in order to reduce load energy consumption and to enhance power quality. Additionally, it is a green solution which significantly reduces CO2 footprint of energy consumers.

### Procurement

EMSc AP offers a variety of procurement models including purchase, lease, rental and a subscription only service (Voltage as a Service™, for a true off balance sheet solution, with a guaranteed cash flow positive outcome).

### Key issues to consider

These funding methods suit the finance requirements of most private companies, government agencies and most public companies.

There are a number of key issues to consider:

Issue	Description
<b>Term</b>	What is the period of procurement or service requirement? This might range from 5 to 10 years, or longer.
<b>Payment options</b>	Usually fixed payments made monthly; but quarterly, semi-annually, or annually, may be arranged to suit the client's cash flow. Irregular repayments are also possible, and may be designed to suit. Payments are usually made by direct debit.
<b>Deposit</b>	Ordinarily a deposit may be payable to the equipment supplier, which may be provided for under the finance agreement.

Issue	Description
<b>Collateral</b>	In some cases a guarantee may be required depending upon the applicant's credit worthiness.
<b>At Term</b>	Depending upon the procurement method adopted, the ownership and continuing use of the equipment may need to be considered.
<b>Balance sheet treatment</b>	However, with the pending changes to the accounting standards, Operating Leases will be deemed an on-balance sheet financing solution. If a true off-balance sheet solution is required, then a service delivery model would be selected.

### Key concepts

Option	Term	Residual	Warranty	Annual Maintenance
<b>1: CAPEX</b>	N/A	N/A	<ul style="list-style-type: none"> <li>15 years from installation</li> <li>No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>Annual maintenance package may be included in equipment finance package.</li> <li>Inclusive of inspection, reporting and administrative charges</li> <li>Delivered by contracting existing site electrical contractor to perform function once per annum</li> <li>In the event that existing site electrical contractor refuses, then additional time and travel costs may be applicable for alternative contractor to attend</li> </ul>
<b>2: Lease</b>	7 years	20% payment at term	<ul style="list-style-type: none"> <li>15 years from installation</li> <li>No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>Annual maintenance included in equipment finance package.</li> <li>No annual maintenance fee to pay during term.</li> </ul>
<b>3. Rental</b>	7 years	N/A	<ul style="list-style-type: none"> <li>15 years from installation</li> <li>No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>Annual maintenance included in equipment finance package.</li> <li>No annual maintenance fee to pay during term.</li> </ul>
<b>4. Rental</b>	10 years	N/A	<ul style="list-style-type: none"> <li>15 years from installation</li> <li>No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>Annual maintenance included in equipment finance package.</li> <li>No annual maintenance fee to pay during term.</li> </ul>
<b>5. BOOT<sup>1</sup></b>	20 years	N/A	<ul style="list-style-type: none"> <li>No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>Annual maintenance included in equipment finance package.</li> <li>No annual maintenance fee to pay during term.</li> </ul>
<b>6. VAAS<sup>2</sup></b>	10 year	N/A	<ul style="list-style-type: none"> <li>No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>Annual maintenance included in service solution package.</li> <li>No annual maintenance fee to pay during term.</li> </ul>

Non-standard periods and other features may be included on a negotiated basis.

<sup>1</sup> Build Own Operate Transfer (BOOT)

<sup>2</sup> Voltage as a Service™ (VAAS)

## Standard inclusions

Option	Warranty	100% Energy Savings Guarantee	Upgrade Guarantee	Savings retention
<b>1: CAPEX</b>	<ul style="list-style-type: none"> <li>• 15 years</li> <li>• No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Based on site specific survey and measurement</li> <li>• Certificate issued by EMSc Asia Pacific prior to installation at each specific site</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Applicable within first 5 years from purchase date</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Energy savings:</i> All energy savings value is retained by the customer</li> <li>• <i>CO2 offset:</i> All CO2 offset value and grant proceeds are sought and retained by the customer</li> </ul>
<b>2: Lease</b>	<ul style="list-style-type: none"> <li>• 15 years</li> <li>• No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Based on site specific survey and measurement</li> <li>• Certificate issued by EMSc Asia Pacific prior to installation at each specific site</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Applicable within first 5 years from purchase date</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Energy savings:</i> All energy savings value is retained by the customer</li> <li>• <i>CO2 offset:</i> All CO2 offset value and grant proceeds are sought and retained by the customer</li> </ul>
<b>3. Rental</b>	<ul style="list-style-type: none"> <li>• 15 years</li> <li>• No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Based on site specific survey and measurement</li> <li>• Certificate issued by EMSc Asia Pacific prior to installation at each specific site</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Applicable within first 5 years from purchase date</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Energy savings:</i> All energy savings value is retained by the customer</li> <li>• <i>CO2 offset:</i> All CO2 offset value and grant proceeds are sought and retained by the customer</li> </ul>
<b>4. Rental</b>	<ul style="list-style-type: none"> <li>• 15 years</li> <li>• No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Based on site specific survey and measurement</li> <li>• Certificate issued by EMSc Asia Pacific prior to installation at each specific site</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Applicable within first 5 years from purchase date</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Energy savings:</i> All energy savings value is retained by the customer</li> <li>• <i>CO2 offset:</i> All CO2 offset value and grant proceeds are sought and retained by the customer</li> </ul>
<b>5. BOOT</b>	<ul style="list-style-type: none"> <li>• 20 years</li> <li>• No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Based on site specific survey and measurement</li> <li>• Certificate issued by EMSc Asia Pacific prior to installation at each specific site</li> </ul>	<ul style="list-style-type: none"> <li>• Included</li> <li>• Applicable within first 10 years from purchase date</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Energy savings:</i> 90% energy savings value is retained by the customer, and 10% is paid to EMSc Asia Pacific</li> <li>• <i>CO2 offset:</i> 90% CO2 offset value and grant proceeds is paid to the customer, and 10% is retained by EMSc Asia Pacific (EMSc Asia Pacific is responsible to manage and collect on behalf of the client).</li> </ul>



Option	Warranty	100% Energy Savings Guarantee	Upgrade Guarantee	Savings retention
6. VAAS	<ul style="list-style-type: none"> <li>10 years</li> <li>No additional warranty fee to pay</li> </ul>	<ul style="list-style-type: none"> <li>Included</li> <li>Based on site specific survey and measurement</li> <li>Certificate issued by EMSc Asia Pacific prior to installation at each specific site</li> </ul>	<ul style="list-style-type: none"> <li>Included</li> <li>Applicable during the first 5 years of the service agreement</li> </ul>	<ul style="list-style-type: none"> <li><i>Energy savings:</i> 100% of guaranteed energy savings value is retained by the customer. If there is an excess energy saving above the Guaranteed Energy then 33% is paid to EMSc Asia Pacific as a gain share incentive</li> <li><i>CO2 offset:</i> 90% CO2 offset value and grant proceeds is paid to the customer, and 10% is retained by EMSc Asia Pacific (EMSc Asia Pacific is responsible to manage and collect on behalf of the client).</li> </ul>
		<p><b>Voltage Performance</b></p> <ul style="list-style-type: none"> <li>Penalty and gain share for Voltage performance</li> <li>As a % of the time Voltage is managed between required levels</li> </ul>		

Non-standard periods and other features may be included on a negotiated basis.

### Balance sheet treatment

On-balance sheet      Purchase, Financial Lease  
 Off-balance sheet      Operating lease (rental) will be soon treated as on-balance sheet  
**Voltage as a Service™<sup>3</sup> is a true off-balance sheet solution**  
 (refer to Voltage as a Service™ product bulletins for further information)

### Other options

Item	Description
<b>Installation cost</b>	Where installation cost is included in the quotation from the distributor the full amount of installation costs may be included in the equipment financing arrangement
<b>Scheduled maintenance</b>	An equipment financing arrangement can include scheduled maintenance costs If selected, then a scheduled maintenance / service contract is included over the term The annual (or other periodic) service fees are added into the customer payment schedule and contract
<b>Deposit</b>	In many industries it is usual for the distributor to require a deposit of 10-30% upfront on placement of an order In most cases once the financing agreement has been executed with the customer, a deposit may be released to the distributor

<sup>3</sup> Voltage As A Service™ and Voltage Performance Contract™ are brands of EMSc Asia Pacific Pty Limited.