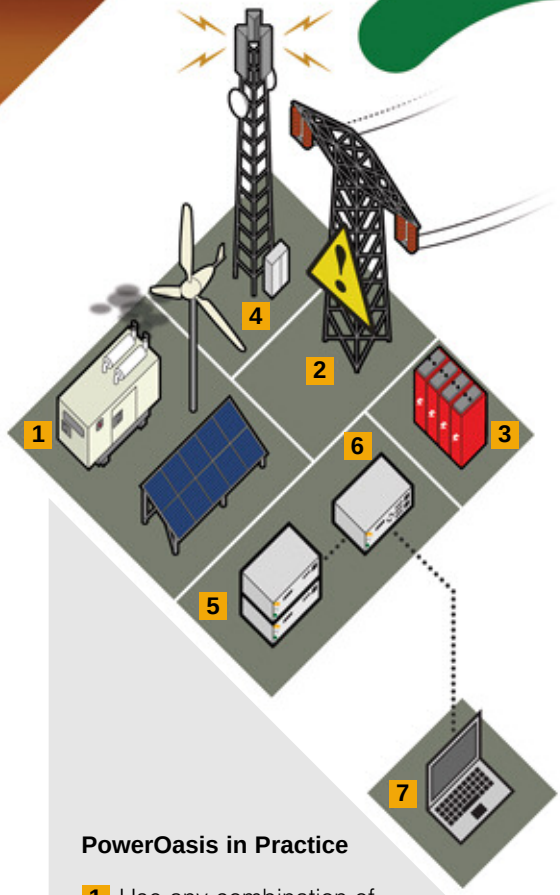
poweroasis Wireless Network Power Management Solutions

PowerOasis has deployed 100s of power management solutions that have optimised base station power and reduced diesel usage by around 50%



The network power dilemma

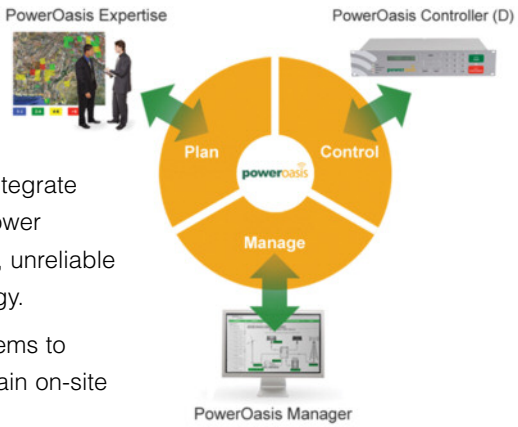
As communications service providers manage existing networks and roll out new networks in remote markets, the need for reliable, efficient, low cost power has become a critical factor – the difference between profit and loss.

Would you like to achieve the following for your network ...

- Reduced diesel consumption and diesel delivery costs?
- Reduced operations and maintenance truck rolls?
- Maximised site availability?
- Remote monitoring and control of site power systems?
- Optimised onsite power use?
- Measurement of power against KPIs?

Total diesel reduction solutions

PowerOasis address three critical elements required for successful solutions:



- Carrier-grade power controllers to integrate batteries with any combination of power sources including diesel generators, unreliable grid and renewable wind/solar energy.
- Remote monitoring and control systems to enable operators to efficiently maintain on-site power by reporting network power performance against KPIs.
- Economic and technical modelling to define the ideal diesel reduction solution for each base station within a network to achieve maximum ROI.

PowerOasis in Practice

1. Use any combination of diesel, wind and solar power sources
2. Utilise an existing unreliable grid power source
3. Optimise battery power storage, charging and lifetime
4. Maximise base station availability
5. Supplement or replace diesel generators with renewable energy
6. Introduce smart generator-battery hybrid power
7. PowerOasis Manager for total power management, remote monitoring, control and ongoing optimisation

Visit our website: **www.poweroasis.com** Telephone us: **+44 (0)1793 784242** Email us: **sales@poweroasis.com**

PowerOasis works with leading equipment providers and enjoys strong relationships with operators and tower companies around the world

Vodafone Qatar:
Wind-Solar-Generator-Battery Solution

Vodafone Qatar commissioned Alcatel-Lucent to deploy its first hybrid powered base station in Qatar, using a combination of solar and wind energy. Central to the solution is a PowerOasis controller that integrates renewable energy sources and provides carrier-grade power. The site is remotely managed against network power KPIs using the PowerOasis Manager to assure site availability and performance. An integrated weather station enables meteorological data to be displayed alongside energy generation and consumption parameters.

"It is one of the most innovative and best-performing solutions that we have tested so far in Vodafone"
(Jenny Howe, CTO Vodafone Qatar)

South East Asia Operator: Generator-Battery Solution and Solar-Generator-Battery Solution

A 200-site wireless network power management solution for a combination of green field, retrofit, off-grid and unreliable grid sites. The PowerOasis Controller (D) is used for smart generator-battery management supplemented by solar energy on a selection of sites. PowerOasis Manager offers full visibility of site power and fuel levels across all PowerOasis sites to aid preventive and corrective maintenance and to support diesel supply chain management. The results speak for themselves with generator runtime being reduced by 50% or more delivering substantial fuel savings, reduced service costs and extended generator and battery service life.

"The solution has confirmed reduced costs and centralised management of network power from the NOC"
(Andrew Keen, PowerOasis COO)

T-Mobile Montenegro:
Wind-Solar-Battery Solution

T-Mobile Montenegro needed a reliable power solution for a series of base stations providing coverage for a new motorway, connecting the airport to the coast. They turned to PowerOasis for a one-stop planning, control and monitoring solution utilising wind and solar power. The network now operates with minimum intervention during the winter months when the sites are inaccessible for more than 4 months.

"The only solution that meets the needs of mobile network operators" *(SISTEM, local installation partner)*

Digicel Vanuatu:
Wind-Solar-Generator-Battery Solution

Digicel was presented with a number of challenges in the roll-out of base station sites across Vanuatu, a volcanic archipelago of eighty-two islands in the South Pacific. At the heart of the network are three PowerOasis powered remote backbone sites that carry 60% of the network traffic. Importantly, the wind and solar solution provides differential autonomy which significantly reduces renewable equipment CAPEX by reducing battery size. The Digicel Vanuatu network is a good example of how a PowerOasis solution strikes a practical balance between CAPEX and OPEX.

"The PowerOasis solution offers superior performance control and configuration" *(GSMA case study)*

Alcatel-Lucent France:
Wind-Solar-Battery Solution

Alcatel-Lucent's Alternative Energy program bridges the alternative energy and the telecom worlds to make renewable power a large scale mainstream deployment case for Radio Access Networks. Alcatel-Lucent has integrated the PowerOasis hardware and software wireless network power management platform into their Alternative Energy program. For Alcatel-Lucent the combination provides high quality on-site control of multiple renewable power sources and full remote management to verify equipment operation and provide network power visibility to prospective customers.

"Exceptional levels of fuel efficiency, power assurance and operational cost control" *(Alcatel-Lucent)*

Let's get started ...

If you need to reduce diesel fuel costs, increase site availability and lower overall site OPEX within your existing network, PowerOasis are the people to talk to. If you are planning or rolling out new base stations come and talk to us and tap into our experience and expertise. Take advantage of our proven methodology to achieve the optimum CAPEX / OPEX solution to powering your network.

poweroasis
Wireless Network Power Management Solutions

Visit our website: www.poweroasis.com Telephone us: +44 (0)1793 784242 Email us: sales@poweroasis.com