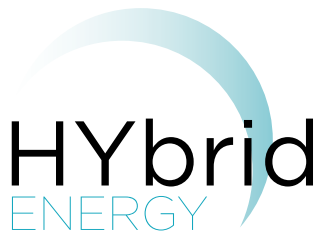


Focus Your Energy



HYbrid Energy Solutions manufactures modular energy stations designed to provide efficient power supplies for the passive infrastructure on all off-grid telecoms sites. HYbrid's global network of advanced off-grid power solutions provides the cleanest, smartest, renewable power source for telecoms businesses at a lower cost to you and the environment.

Value to the Customer

Ensures continuity of service from the telecoms provider.

Optimized site infrastructure to reduce energy requirement.

Modular systems which increase in capacity in line with the telecoms site load demands. (1kW - 30kW)

Integration of solar and wind power.

Reduced engine run hours and fuel consumption.

Easy retrofit to existing telecoms sites.

Remote monitoring and service support.

Performance monitoring and reporting.

Integrated Fueling Technology (hardware and software) providing security while accessing and dispensing fuel.



“ Telefónica has been investing in the reduction of our internal emissions of GHGs since 2006 in particular by promoting energy efficiency and reducing the consumption of fuels in the operations of our fixed and mobile networks. To this end, we have replaced all standard generators on off-grid sites with HYbrid Energy Stations. HYbrid has allowed us to meet our corporate responsibility and sustainability policy as well as deliver operational cost savings. Furthermore, HYbrid's energy stations are less susceptible to global fuel price fluctuations which allow us to accurately budget for our off-grid sites. ”

Ray Doyle,
Infrastructure & Energy Manager,
Telefónica



Cost of Ownership

HYbrid's in-house expertise will help and assist when planning new off-grid sites or retrofitting existing sites. HYbrid will provide full financial planning on a **\$/kW** basis and project manage each site enabling the telecoms company to focus on their core business.

Services provided:

- Site optimization or design
- Annual fuel consumption planning
- Maintenance frequency scheduling
- Cost of Ownership modeling
- Project Management
- Training



HYbrid Products:

HES 3 – HES 4

Modular design and fully automated.

Integrated state of the art technologies that can be monitored remotely.

Diesel / Gas Engine & charge alternator.

Lead Acid, Pure Lead or Lithium ion battery options.

Optional HYbrid battery management system. (Lithium Ion)

Preinstalled 5KVA Inverter and DC distribution board.

Built in remote radiator and fan to manage heat built up after shutdown.

Variable speed control to optimize fuel consumption at various loads.

Sound rating < 65dBA @ 1m.

Higher battery life with best in class 32 pole rare earth magnet alternator.

<0.01% DC output ripple.

Delivered in a safe and highly secure steel enclosure.



Your Energy Supply Partner



HYbrid provides a variety of services to support the telecoms industry:

Full energy supply contract on a \$/kW basis

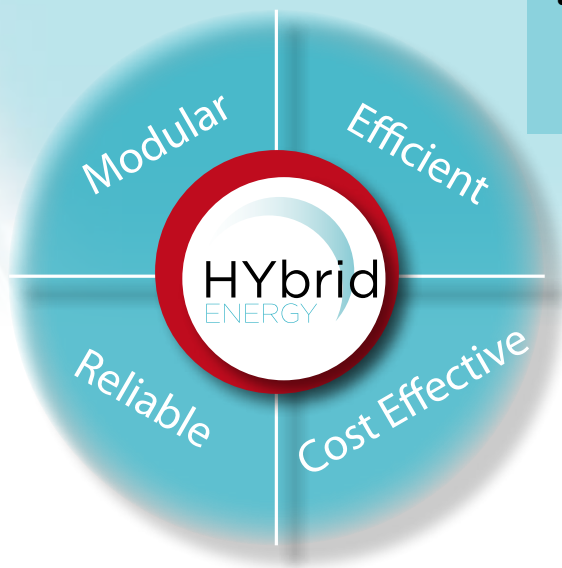
- Capital equipment
- Fuel supply and management contracts
- Service & maintenance
- Project management

Equipment leasing contracts

- Remote monitoring
- Energy monitoring and reporting
- Fuel management & reporting

Energy monitoring contracts

- Monitor individual tower sites
- Report any anomalies
- Fuel monitoring & reporting



“ Tiger is a niche property consultancy company based in Europe specializing in telecoms and utilities. During network rollout projects we encounter a lot of objections from the public due to contractors deploying generators whilst awaiting network power connections. By utilizing HYbrid generators we have eliminated such complaints and the units are so quiet that they fall within strict boundary noise limits in residential areas. We also find that the National Parks and Forestry are willing to accept this option as the risk of fuel spillage is minimized. ”

**Chris McGrath, CEO,
Tiger International**



Leading the Way - HYbrid Energy Stations

More Efficient Power

Based on a detailed site evaluation, HYbrid will provide a system to meet your optimized load and ensure maximum efficiency.

Expect

- 50% - 80% reduction in fuel consumption
- 50% - 80% reduction in maintenance costs
- 50% - 80% reduction in operating hours
- Lowest lifecycle costs of any DC power supply

Smarter More reliable

The HYbrid Control System provides an unprecedented control and monitoring package.

Expect

- 24 x 7 remote monitoring and system diagnostics
- Deployed globally with GSM coverage
- Alerts and alarm indication allowing preventative measures without having to attend site
- Monitoring engine, alternator, battery parameters and fuel consumption

Social & Environmental Responsibility

- 50% - 80% reduction in CO2 emissions / CO2 Reduction (60 tonnes/year per BTS)
- 100% Containment for all liquids
- Less Frequent Fuel Delivery
- No External Hoses / Tanks



Shared Access is a developer and owner of shared wireless infrastructure, specifically for the use of mobile & broadband operators. "We meet many challenges securing network power due to, planning requirements, time pressures, site locations that are often remote, and local community issues. We have deployed HYbrid Energy stations as an alternative in some instances to grid power, their DC systems have enabled us to fulfill our operational and design standards, providing cost effective and reliable alternatives to grid supply."

Niall Clyne, Director of Rollout, Shared Access Ltd.

Field Trials Test Data - Results

	Unit	Results Trial 1		Results Trial 2	
		DC HYbrid	AC Hybrid	DC HYbrid	AC Hybrid
Type of System		DC HYbrid	AC Hybrid	DC HYbrid	AC Hybrid
Type of site	Grid/Off-Grid	Off-Grid		Grid Connected	
Quantity Of Operators	Qty	2		3	
Number of days of Trial	Qty Days	60		60	
Average Load over the term of the Trial	Amps	34		75	
Engine capacity	kVA	7	15	7	25
Fuel Consumption	Ltr/Hour	1.82	2.7	2.36	4.7
Hours of operation per 24 hour day	Hours/Day	10	12	11	10
Total Fuel Consumption	Ltrs/Day	18.2	32.4	25.96	47
	Fuel Saving Ltrs/Day	14.2		25.04	
	% Fuel Saving Per Day	43.83%		44.77%	

Average Fuel Saving	44%
Average Maintenance Cost Reduction	51%
Annual Fuel Saving (Diesel Cost@ \$.93/Ltr)	\$5,286.66
Total Annual Savings \$ USD	\$8,186.66

