

OUR SOLUTIONS

Hybrid power plants

The right combination of solar, thermal generation and battery storage for your needs

Get **cheaper**, **cleaner** and **more reliable power** on demand with our unique combination of solar, storage and gas

Hybrid power plants combine cost-effective renewable energy and battery storage with the reliability of thermal energy. It's flexible and dependable – and we can bring it to you wherever and for as long as you need it.

Our Hybrid Solutions fit your demands: Solar energy is cheap and clean: Once solar plants are installed, power generation costs are almost zero – as are emissions! We have a great mobile and modular solar power pack, bringing you solar energy optimised for off-grid use, starting from three-year contract duration.

Our traditional, fast-start, thermal power generation is an ideal fit for our solar offer. Generators running on diesel, HFO or gas have been providing reliable power for years. They are the go-to choice for safe and stable electricity, especially in remote areas, and provide the ideal contingency plan when inclement weather affects solar generation. Our hybrid solutions improve them even further.

Finally, our intelligent battery storage is the third pillar of our offering and key for a stable and reliable power supply. It strengthens your grid by buffering the impact of fluctuating power demand and supply. At the same time,

it increases the generators' lifespan and decrease associated operations and maintenance (O&M) costs by running them less often and more efficiently.

Hybrid Power – Smart Power

- Combine benefits of renewables, thermal generation and battery storage in one single contract
- Better economics, more flexibility and lower emissions
- Increased renewable penetration
- Optimised use of generators to lower fuel and O&M costs

Key facts

- **24/7** Availability of reliable power
- **\$0** No upfront capital outlay
- **5-20%** Savings from the first kWh
- Bundled in a **single contract**
- Contract durations from **3-10+ years**



Scalable power. **Wherever, Whenever.**

To get the most out of your systems, we have created a modular and suitable hybrid microgrid package that smartly combines solar, battery storage and thermal gas, diesel or HFO generators – all seamlessly integrated and efficiently managed by our sophisticated software.

You benefit from reliable power around the clock, come rain or shine, saving money and helping you do your part for the environment.

Our hybrid package is available for rent, with no up-front investment, so you retain capital for your business operations. And it delivers the same flexibility we are known for: scalable power, whenever and wherever you need it.

Our cleaner, reliable, hybrid energy start at just 1 MW in capacity and go up to 200 MW – so we have your power needs covered.

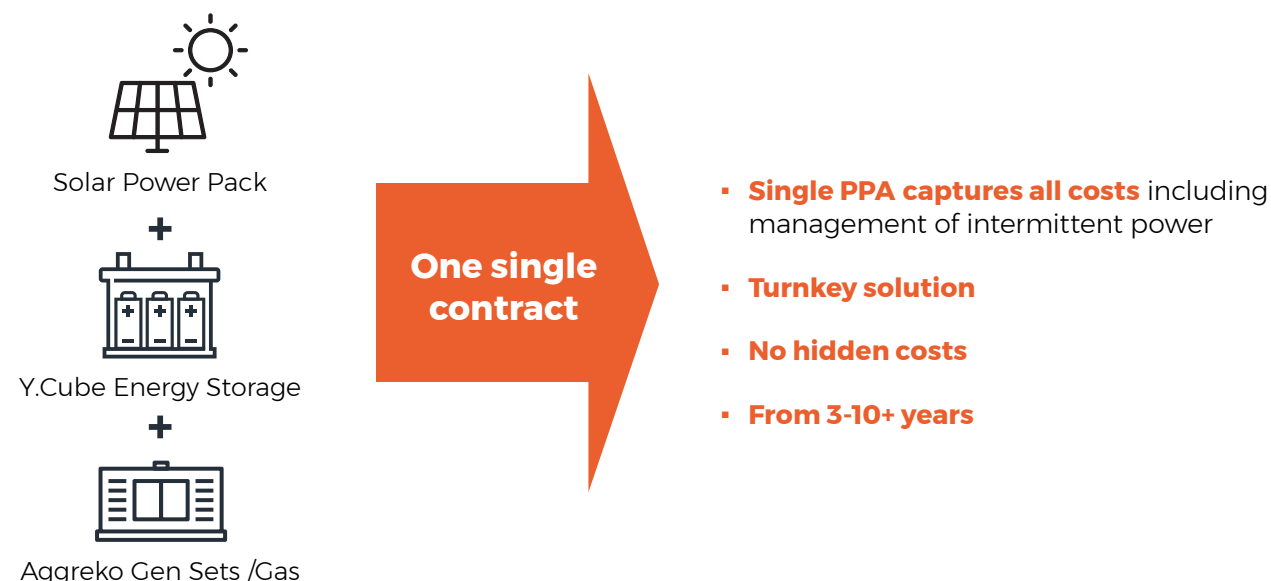
We combine the strengths of renewables, thermal generation and battery storage in one single contract



Energy as a Service

In today's fast-evolving energy landscape, long-term commitments may lead to stranded assets and tied-up capital – especially with relatively new technology like battery storage.

That is why many customers opt for a risk-free, 100 percent reliable solution: Energy-storage-as-a-service. We bring this service tailored to your needs.



Our hybrid package

1 MW Solar Power Pack

Our 1 MW solar power pack is the ideal solution for off-grid demands: Our single axis tracking systems maximise energy production, while producing a more stable, more predictable yield curve. By combining string inverters with containerised controls, we deliver greater reliability and resilience to you. The Solar Power Pack can be deployed within 3-4 months, has low O&M requirements and is perfectly suited for harsh environmental conditions.

Y.Cube - Energy Storage to Go

The Y.Cube is a ready-to-install energy storage system – with everything included in a standard 20ft container. That includes batteries, inverter, HVAC, fire protection and auxiliary components, all tested by our experts and operated by the smartest software on the market.

Single units can be easily combined to deliver the power and energy capacity required for your business. The Y.Cube comes in 1 MW building blocks with either 30 or 60 minute durations and can cover a variety of applications all of them key for a more flexible, reliable and cost-effective power.

Aggreko Gen Sets / Gas

We have the world's largest fleet of mobile, modular power generators. Our generators run on gas or diesel, as well as hybrid resources, according to what you have available. They are sound attenuated, available in 50 or 60 Hz and with safe-ALL containment bases that prevent fuel spillage. We also provide flexible fuel storage tanks with environmentally-responsible double-wall construction. And we also take care of all the relevant ancillaries too, like cabling, switchgear, transformers, project facilities and power management systems.

Aggreko Control Platform

Our software ensures that you always get the most out of your system while guaranteeing full system optimisation. Combining advanced control algorithms with a robust communications architecture, it delivers best-in-class energy management. Our control platform safely and efficiently operates all system components to deliver the real and reactive power needed. In addition, it integrates with external systems, such as existing customer SCADA systems and other on-site devices.

Example use cases

Our hybrid package is designed to benefit any industry with a power need in locations with limited or no access to permanent power:

Mines

At a gold mine in one of the most remote parts of Australia, one of our solar hybrid solutions is already in place and delivering lower emissions and fuel costs for our customer. The power, derived from our optimised gas generators and our solar PV panels, is ably assisted by 1 MW of energy storage that acts as a stabilizer for any fluctuations in demand and solar power. We also have a hybrid solution on site at a mine in Eritrea too – showing that mining projects are ideally placed to enjoy the many benefits of our hybrid offering.

Data centres – are often built faster than a reliable grid connection. Data is big business and there can be no room for uncertainty. A guaranteed power solution is vital – and our temporary gas power, allied with our innovative software and energy storage as a contingency plan – can give your data centre the solid foundation it needs.

Islands

Island communities and businesses can benefit from our hybrid solutions in a big way. Wherever there is easy access to a gas supply, the combination of solar, battery and gas can be especially lucrative, providing cleaner, cheaper and more stable energy.

Plentiful gas sources - Regions like the Caribbean and parts of Russia - where there is a relatively easy access to gas - the combination of solar, battery and gas can be very attractive.

Renewable Energy / Oil and Gas

Our modular equipment have extensive use in off-shore sites, and our energy storage is currently being used as part of an energy solution for the world's first floating wind farm. Whether your site is off or on grid, we have the cost-effective, clean answer you've been looking for.



ADVANCED ENERGY MANAGEMENT SYSTEM

Solar power

- Low cost of energy
- No fuel
- Low maintenance
- Long service life
- Zero emissions
- Sustainable

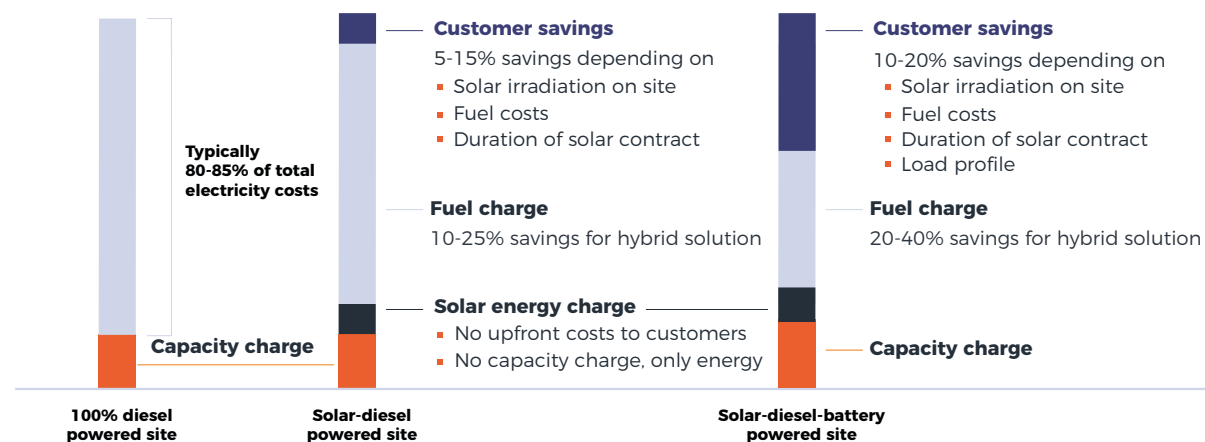
Battery storage

- Enhanced grid stability
- Dependable black-out prevention
- Renewable integration
- Maximum plant efficiency
- Reduction of overall cost

Conventional Thermal Power (diesel, gas or HFO)

- Reliable 24/7
- Fast response
- Controllable
- Low cost of capacity

Bringing efficiency to a new level



Where Diesel is the only viable option, it constitutes a high proportion of operating costs for users located in remote off-grid areas. It is also susceptible to market fluctuations.

Adding solar and batteries to your power package requires no upfront investment. The cost of energy from solar-battery-thermal hybrids is significantly lower than it would be

from purely thermal generation, which is often the only viable alternative power source for off-grid rural areas. The cost of energy saving relative to thermal generation is about 20%*.

As a result, up to 20% of the energy costs can be saved using a hybrid solution by displacing expensive diesel, and CO₂ emissions are reduced by 10-30%.*

Our hybrid package provides you

cheaper and more predictable energy costs while increasing your security of supply. By adding our energy storage system, you can further increase the share of solar energy and benefit even more from your diverse energy mix.

Like our technology, we're flexible on our commercial approach too. We are happy to take all the investment on our balance sheet, or we can provide financing options with our trusted partners – whatever you prefer.

* Percentages heavily depend on diesel fuel costs, on-site solar irradiance, duration of contract, user load profile and other factors.

One-stop power solutions for more flexibility, reliability and revenue

We design, build, install, commission and operate the equipment as a full turn-key solution, with no hidden costs. We give you highly scalable power - **your grid will continue to operate with no disruption no matter how many power plants of any fuel mix are deployed.**



Design

- In-house engineering and integration expertise
- Technology agnostic (pick best technology for your needs)
- Seamless multi-vendor integration



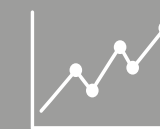
Financing

- Ability to finance whole fleet on balance sheet and provide power as a rental solution
- Or we can help source cost-effective financing which allows you to own the plant from day one
- Ability to move fast



Deployment

- Highly qualified in-house field technicians
- Broad geographic coverage



Operations

- Field service including preventive and corrective maintenance
- 24/7 real-time monitoring through Aggreko Remote Monitoring
- Client's online portal with access to all sites data

Here for you now – and in the future

We like to think of ourselves as being on your team, partners, helping and supporting you, from initial discussion to the moment we leave your site after a successful project.

You can count on our expert support when your business needs it – no matter how remote or challenging your location.

From providing peace of mind with detailed planning to remote monitoring – you can be sure our equipment will always work just the way it should.

A broad range of industries has collaborated with us over the past 50+ years – helping us to evolve, learn and grow along the way. These experiences mean we are now able to bring optimal,

cost-effective and reliable options to customers, however unique, urgent or extreme the job.

Based on these in-depth insights to our client's needs we have built the largest, best-in-class fleet in the world. Get in touch with us to explore what we can do for your business!



Power **how** you need it,
when you need it, **where** you need it.



aggreko

✉ hybridsolutions@aggreko.com

Europe & Africa: **+49 30 818 79 90 10**
America: **+1 512 268 81 91**
Australia: **+61 1300 728 324**