

Sheet n° W03 CSR ACTION PLAN

SDMO hybrid **solutions**

Description

Within the context of its commitment to the environment and in line with the current trend to minimize operating costs at Telecoms sites, SDMO has developed a number of tailormade solutions to meet such demands. SDMO hybrid generating sets provide turnkey solutions ready to be connected to the BTS (Base Transceiver Station). Specially designed for new sites in rural areas that are not connected to the grid, SDMO hybrid energy solutions provide a reliable source of energy 24/7 with generating sets running for between 5 and 8 hours a day. These systems make it possible to make up to 80% fuel savings, ensuring return on investment is achieved within less than 2 years. The complete energy solution – the generating set, AC/DC rectifiers, storage batteries, fuel tank, energy source control cabinet and the numerous available options – is factory-assembled in a 10 or 20 foot container. This manufacturing system ensures optimum quality and operational effectiveness at a level our customers have come to expect from SDMO.

SDMO hybrid solutions offer real advantages such as a safe and controlled «cycling» configuration, proven results and benefits and straightforward installation.

Hybrid systems offer two possible operational modes, using a single or dual energy source.

Single energy source: generating set and storage batteries.
This system provides enting torage and utilization of the energy product

This system provides optimum storage and utilization of the energy produced, thereby considerably reducing fuel consumption and the number of hours the generating set operates each day. This solution also considerably reduces operating expenditure (OPEX) and provides a short capital write-off period.

Dual energy source: generating set, solar panels and storage batteries.
With a set of photovoltaic modules placed on the container roof, this hybrid energy generating system enables the generating set to be used for a minimum amount of time. Solar power slows down battery discharge and reduces the number of cycles. At equivalent load, this solution lengthens the useful life of the batteries and reduces generating set fuel consumption and consequently pollution. As a result, operating expenditure (OPEX) is also optimized.

As part of this hybrid solution the standard generating set may also be replaced by a long-running generating set. Thanks to this low-consumption equipment, maintenance phase frequency is reduced by a factor of eight and operating expenditure even further.



Results

The hybrid solution offers the end customer significant savings compared to a classic solution for a given installation scenario

	CLASSIC SOLUTION 2 generating sets at isolated site	HYBRID SOLUTION With long-running generating set	BENEFIT
Fuel consumption (L per year)	22 792	3 447	- 85 %
Number or operating hours (Hs per year)	4 383	996	- 77 %
Generating set useful life (years)	3	15	+ 80 %

Investment in a hybrid solution as opposed to a classic solution offers our customers the ability to:

- reduce the carbon emissions of their installation thanks to lower fuel consumption (-85%);
- lengthen the life cycle of their generating set by 12 years and therefore reduce their overall production of industrial waste.

