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# Saft batteries will provide vital energy buffer for Terracon's 'Energy Container' for renewable energy applications

Saft batteries enable self-contained hybrid wind, photovoltaic and diesel generation system to produce reliable renewable energy to meet the electricity needs of remote locations

**Paris, May 13, 2008 –** Saft Sunica.plus rechargeable nickel-cadmium (Ni-Cd) batteries have been specified by Terracon Energy gmbh to provide the vital energy buffer for an innovative, self-contained, transportable 'Energy Container' designed to provide an almost instant source of up to 10 kW of renewable energy in remote locations.

The Terracon Energy Container integrates a complete hybrid renewable power system - comprising wind generator, photovoltaic (PV) modules, diesel generator, batteries and associated control and monitoring systems and inverters – within a standard 6.1 m ISO shipping container. On arrival at site the container simply has to be craned into the required position. There is no need for a base plate and the container also acts as the foundation for the 15 m high wind generator. This makes the power system fast to set up and it can be ready to produce electricity in less than a day.

### **Energy buffer**

The Energy Container generates electricity from the sun and wind and, if necessary, supplements this with the diesel generator. The Saft Sunica.plus battery system provides the vital balance between the energy generated and the energy consumed to ensure continuity of supply. So it acts as a buffer to make up the difference when the available renewable energy is less than the demand, it also supplies all the energy needed when there is no renewable energy available and stores the excess energy when demand falls below the output from the wind generator and PV modules. If needed, the battery is also recharged by the diesel generator.

The Energy Container guarantees a peak output of 10 kW and a continuous output of 5 kW. Efficient use of renewable energy sources alone enables it to produce between 5,000 and 15,000 kWh per year and in combination with the diesel generator it could supply up to 37,000 kWh.

# Saft Sunica.plus

Terracon anticipates that the Energy Container will be installed in a wide range of applications where the lack of a fixed electricity grid calls for an easy to transport, self-contained power system. The majority of installations will be in remote locations, subjected to extreme environmental conditions with limited access for maintenance. This called for a battery that was highly efficient, reliable and with low maintenance requirements

Saft Sunica.plus Ni-Cd batteries proved to be the ideal solution for Terracon as they are designed specifically for renewable energy applications, especially in remote installations. They offer exceptional performance including high efficiency, low maintenance (with topping up intervals extended to four years – depending on the application) and absolute reliability combined with the capability to operate in extreme temperatures (from  $-50^{\circ}$ C to  $+70^{\circ}$ C) and at any state of charge, while also offering a completely predictable 20-year service life.

The exact specification of the Saft battery installed in each Energy Container will vary according to specific customer needs. Typically, it will be a nominal 48 V and 800 Ah capacity.

## About Saft

Saft (Euronext: Saft) is a world specialist in the design and manufacture of high-tech batteries for industry. Saft batteries are used in high performance applications such as industrial infrastructure and processes, transportation, space and defence. Saft is the world's leading manufacturer of nickel-cadmium batteries for industrial applications and of primary lithium batteries for a wide range of end markets. The group is also the European leader for specialised advanced technologies for the defence and space industries. With approximately 3,900 employees worldwide, Saft is present in 18 countries. Its 15 manufacturing sites and extensive sales network enable the group to serve its customers worldwide. For more information, visit Saft at www.saftbatteries.com

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