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PHOTON ENERGY PRESS RELEASE

## PHOTON ENERGY AND BAI SWITCH TO GREEN ENERGY WITH SOLAR POWER STORAGE TECHNOLOGY

**Sydney / Berlin, 16 July 2014 – Photon Energy has secured funding from the German Federal Ministry for Economic Affairs and Energy to design, install and operate a solar PV powered battery power supply for a broadcast antenna operated by communications infrastructure provider BAI. Thanks to a solar PV system combined with 215 kWh's of battery storage the antenna will become a benchmark for providing a complete power supply for remote locations. The tower will store solar power during daylight hours and provide a constant 24 hour power supply from the battery system and back-up generator. The technology for the system is largely Made in Germany.**

Global solar power solutions provider Photon Energy has teamed up with German Energy Agency (dena) and BAI for a pilot project to pioneer the use of renewable energy for communications infrastructure in remote locations. Using mainly German technology Photon Energy will install a 215 kWh solar PV powered battery system that will replace the current power system of a broadcast antenna near Muswellbrook in NSW, operated by BAI. Once successfully tested the concept could be implemented on thousands of sites across Australia. Details about the project can be found at [www.solaroffgrid.info](http://www.solaroffgrid.info)

*„Having been selected by dena to implement this innovative solar PV battery power supply is a great step forward for solar power to provide a complete clean and economically viable power supply for remote sites, dena has shown confidence in our solution and it is great success for us,“* says **Michael Gartner, Managing Director of Photon Energy Australia.** *„The potential for solar PV in the replacement of conventional energy sources is substantial and will bring cost benefits and emissions savings for Australia in the coming years and decades“,* Gartner adds.

**Jim Hassell, BAI Group Chief Executive Officer, said,** *„We're thrilled to be involved in this groundbreaking project. As a service provider that relies heavily on external market forces, it's exciting to think that soon we'll be able to generate much of our own power. The longer-term outcome of this project will prove beneficial for our customers in many ways, as we'll be able to provide them with a lower carbon footprint, more cost certainty and improved reliability against the grid in remote locations. We're looking forward to assessing the outcomes of this project for a potential future network-wide implementation.“*

The telcom tower will be powered by a 39 kWp solar power installation using 215 kWh of batteries and a 8 kVA diesel back-up system for emergencies. The technology – 96 solar panels, 24 BAE batteries (supplied by R+J batteries), 3 SMA inverters and a monitoring system – is mostly Made in Germany.

Photon Energy has already installed several rooftop power plants in Australia and has recently presented revolutionary, standardised financing option to unlock the commercial PV market for business customers. *„We are thrilled that we can show how to incorporate solar PV into any given energy system and prove that using abundant sunlight for your own power consumption is the way forward“,* concluded **Managing Director Michael Gartner.**

This project is part of the worldwide dena Renewable Energy Solutions Programme coordinated by Deutsche Energie-Agentur GmbH (dena) - the German Energy Agency - and co-financed by the German Federal Ministry for Economic Affairs and Energy (BMWi) within the initiative „renewables – Made in Germany“.

### MEDIA CONTACT

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### Photon Energy

Photon Energy NV is a global solar power solutions and services company covering the entire lifecycle of solar power systems. Since its foundation in 2008 Photon Energy has built and commissioned 50 MWp of solar power plants across two continents and supplied the technology for many more projects. Photon Energy's O&M division has more than 50 MWp of power plants under contract and is the leading provider of maintenance services for Satcon inverters.

[www.photonenergy.com](http://www.photonenergy.com)

### BAI Group

BAI is the owner and operator of one of the most extensive terrestrial broadcast transmission networks in the world. In Australia the company provides fully managed transmission services, site sharing, co-hosting, online application hosting and infrastructure services to the telecommunications, emergency services and broadcasting industries. BAI owns businesses in Hong Kong, Canada and the USA that specialise in the design, installation and operation of cellular and Wi-Fi coverage in mass transit subway venues.

[www.baigroup.com](http://www.baigroup.com)

### Deutsche Energie-Agentur GmbH (dena)

The Deutsche Energie-Agentur GmbH (dena) - the German Energy Agency - is the centre of expertise for energy efficiency, renewable energy sources and intelligent energy systems. dena's aim is to ensure that energy is used in both a national and international context as efficiently, safely and economically as possible with the least possible impact on climate. dena is working with stakeholders from the worlds of politics and business and from society at large to achieve this aim. Shareholders in dena are the Federal Republic of Germany, KfW Bankengruppe, Allianz SE, Deutsche Bank AG and DZ BANK AG.

[www.dena.de](http://www.dena.de)

### renewables – Made in Germany Initiative

Since 2002 the German government has been closely involved in supporting the global dissemination and transfer of technologies for renewable energies, under the brand "renewables - Made in Germany". The responsible authority, the Federal Ministry for Economic Affairs and Energy, is thus making a significant contribution to international climate protection while promoting the worldwide acceptance and use of renewable energies.

[www.renewables-made-in-germany.com](http://www.renewables-made-in-germany.com)

### dena Renewable Energy Solutions Programme (dena RES Programme)

The dena RES Programme was developed by the Deutsche Energie-Agentur GmbH (dena) – the German Energy Agency. This programme, co-financed by the Federal Ministry for Economic Affairs and Energy within the initiative "renewables – Made in Germany", supports renewable energy companies entering new markets. Within the framework of the programme reference and demonstration projects are installed nearby designated institutions in different countries around the world. The installation is accompanied by comprehensive marketing and training programmes. These projects impressively present high-quality renewable energy technology.

[www.renewables-made-in-germany.com](http://www.renewables-made-in-germany.com)

### Key Suppliers

#### SMA Australia

SMA Australia Pty. Ltd. is one of 21 global subsidiaries of German parent company SMA Solar Technology AG, and as an energy management group, offers innovative key technologies for future power supply structures. The product range includes both inverters for photovoltaic plants connected to the grid as well as inverters for off-grid systems. SMA's market leading product portfolio includes a compatible inverter for every type of module on the market and for all plant sizes. SMA supplies photovoltaic inverters to residential, commercial and industrial sectors, partnering with a large distribution network.

[www.SMA-Australia.com.au](http://www.SMA-Australia.com.au)

#### BAE Batterien

BAE Batterien GmbH (BAE), located in Berlin, is a medium-sized company with a long tradition in manufacturing industrial lead-acid batteries. Since more than 110 years BAE supplies reliable energy to the world. The core business of BAE is the production of stationary batteries, especially wherever electricity needs to flow uninterrupted like in the emergency power supply for data centers, hospitals, electrical power supply facilities and telecommunication infrastructures. More over BAE produces batteries for motive power and railway applications. Since many years BAE also operates in the market for renewable energy. BAE provides solutions for a reliable and environmental-friendly electrical power supply.

[www.bae-berlin.de](http://www.bae-berlin.de)

The BAE batteries for the project are **supplied by R+J Batteries**. Established in 1996, R&J Batteries has become one of Australia's fastest growing battery companies. They specialize in the importation and distribution of a comprehensive range of lead acid batteries.

Previously a specialist importer of automotive and commercial batteries for SLI (Starting, Lighting & Ignition) applications, they have successfully diversified to also distribute standby, deep cycle and energy storage batteries. They are the Australia agent for the BAE brand of energy storage batteries.

[www.rjbatt.com.au](http://www.rjbatt.com.au)