

# Sustainable energy generator scoops top eco award



**Winner:** The HybridGen bi-diesel hybrid generator has won a sustainability award.

A bio-diesel generator has been recognised for its contribution to the sustainable energy industry.

Regen Power was awarded the Product and Technology Award by the Sustainable Energy Association of Australia (SEA) at a ceremony in Perth in March.

The Product and Technology award is for any innovative new renewable energy product, introduced onto the market since the start of 2010.

Regen took the prize for its HybridGen, a variable speed diesel/bio-diesel generator.

HybridGen is a cost-efficient alternative to conventional diesel generating systems. Its conceptualisation and design has been developed to face the problems of conventional diesel power system such as the engine operating on low load affecting wet stacking and cylinder glazing of the engine, poor fuel efficiency, maintaining stable voltage and

frequency under varying wind and solar inputs.

The innovative technology developed for HybridGen improves the reliability, quality and efficiency of supply while also providing fuel savings.

Regen Power's expertise in the field of remote area renewable energy electrification has been drawn from various research activities and publications of its founder and managing director, Professor Chem Nayar and Regen Power Intellectual Property which includes US Patent titled 'Power conversion system and method of converting power' (Prof Nayar is the principal inventor of this patent which has been assigned to Regen Power.

Features of Regen Power's engine are greater efficiency and improved performance reliability. The company said its key innovation is, with the help of a smart controller, the machine

can be readily integrated to other renewable energy sources such as photovoltaics and wind power.

Given the intermittency of solar and wind, this is a major step forward to supplying a more predictable and dependable output. The new technology allows the diesel generator to run at variable speed (rather than at a constant speed) while maintaining constant frequency and voltage; delivering the variable load.

The SEA awards recognise sustainable energy excellence and innovation. They have been developed to honour outstanding achievements and offer opportunity for enterprise members, non-profits, retailers, government authorities and individuals to be recognised in front of their peers for their major achievements in advancing the adoption of renewable energy across Australia.